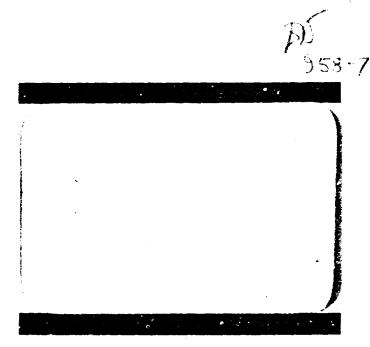
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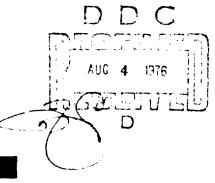
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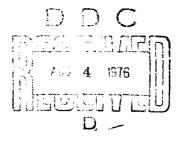


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AUTOPILOT SYSTEM AIRBORNE DIFFICULTIES REVIEW



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GENERAL DYNAMICS SAMSO TR-76-166 Issue Date:	15 August 1966/
DIFFICULTIES BEVIEW ATLAS BOOSTER AIRBORNE AND GROUND SUPPORT SYSTEMS.	(2) 585p.
BOOK II. GENERAL INFORMATION. Volume III. Autopilot System Airborne Difficulties Review. BUSTIFICATION Por liv. on Cile By BISTIFICATION AVAILABILITY CODES Gist. AVAIL and or SPECIAL Por live and or SPECIAL Por live and or SPECIAL AVAILABILITY CODES	DDC
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BOOK II - DIFFICULTIES REVIEW - AIRBORNE CONTAINS THE FOLLOWING VOLUMES

VOLUME I AIRFRAMES

*VOLUME II ABORT SENSING AND IMPLEMENTATION SYSTEM

VOLUME III AUTOPILOT

*VOLUME IV AUXILIARY POWER SOURCE

VOLUME V ELECTRICAL

*VOLUME VI GUIDANCE

VOLUME VII HYDRAULICS

VOLUME VIII INSTRUMENTATION

VOLUME IX PYEUMATICS

VOLUME X. PROPELLANT UTILIZATION

VOLUME XI PROPULSION INTERFACE

VOLUME XII PROPULSION

VOLUME XIII RANGE SAFETY COMMAND

*VOLUMES II, IV AND VI UNDER ONE COVER.

GENERAL INFORMATION

The Difficulties Review encompasses problems gathered from the factory, the field, (ETR and WTR) and UTP. The factory difficulties are limited to "selloff" and rerun composite testing.

In the UTP area, the difficulties were excerpted from Central Test Control Reports, Problem Reports, Supplementary History Sheets and Problem Review Reports.

Field problems for the Difficulties Review have been limited to captive flights, flight readiness firings, actual countdown dual propellant loading, quad tanking, component reliability testing, and flight acceptance composite tests. Difficulties called out in the search for critical weakness program was not documented.

GSE problems shall be limited to ETR Complex 12, 13, 36A and 36B for the present edition. Hereafter only booster difficulties shall be maintained.

Failure analysis reports cover difficulties from the field and factory and may complement the information above.

The GSE Difficulties Review, Book 1 contains 14 Volumes, one volume for each system, under one cover. Each volume is appropriately indexed.

The Airborne Difficulties Review, Book 2 contains 13 volumes. Each volume is under separate cover except Volumes II, IV and VI. Volumes II, IV, and VI are under one cover because of the limited material contained in each volume. All volumes are appropriately indexed.

A guide to facilitate interpretation of data in the Difficulties Review (GSE and Airborne) is part of each book or volume.

DIFFICULTIES REVIEW AUTOPILOT SYSTEM - A/B

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Potentiometer

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Power Supply

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Accelerometer

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Amplifier

Amplifier

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Inductor

Insulation

Integrator

Logic Circuit

Modulator

GENERAL DYNAMICS

Convair Division

Subject:

Explanatory Information For Use of Difficulties Review (DR)

Data Tab Runs

This information has been prepared to facilitate use of the <u>DR</u>. It is not intended to describe how the DR was prepared nor the scope of the existing effort.

The Difficulties Review (DR) is presented on a form compatible with automated data processing and printout.

Appearing at the top of the page (outside of blocked-in areas) is the identification of the system and whether it is Airborne or Ground Support Equipment. Appearing with this identification is the date of the document and the page number.

On the right hand side outside of the blocked area, appears the <u>abstract number</u>. An abstract number is assigned to each item of the Difficulty Review to facilitate traceability to the original input document.

Appearing under the major identification are blocks wherein the information on component or system difficulty is identified and explained. Attached are samples of pages coded for reference to the following definitions and explanations:

CODE

EXPLANATION



This group of blocks callout system, subsystem, test/report number, failed component name, difficulty (Dif) data source, and GDC part number if applicable. Also called out here is the vehicle number, if applicable, and the date of difficulty.

In the same row, the <u>site</u> location, and in case of a flight, captive flight, or countdown, the time will be entered.

The block containing PRI and OTH refer to whether or not the failure is <u>primary</u> or a <u>secondary</u> failure. A secondary failure is to be interpreted as caused by another discrepancy.

The last block in this row is obvious and requires no further explanation:

- 2 Refers to a major system of the launch vehicle.
- Refers to subsystem of a major vehicle system if applicable, (Booster, sustainer, etc).

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CODE	EXPLANATION
4	Is a report number as opposed to type of report, (UTP, Countdown, Flight, FAR, etc.).
5	Is a type of report, such as a FAR, UTP, FRF, etc.
6	Refers to a component part by name.
5 6 7	Is a component piece part of the component and referred to by name, (plug, seal, wiring, diode, etc., only where applicable).
8 9	Is a GDC part number, if applicable.
9	Refers to a site or location at time of discrepancy on the component or vehicle system.
10	Is the vehicle on which discrepancy occurred. Vehicle rumber listed only if unit was installed on a vehicle at time of discrepancy.
11	Is the vendor part number, if applicable.
11 12 13	Is the vendor name, if applicable.
13)	Is the failure caused by other component or other system. This item defines the failure as secondary or not secondary.
14)	Refers to the primary failure. If item is labeled no, then item (13) may appear as a yes.
	Should item (13) appear as a yes, then an abstract will have been written to identify the cause of failure effecting the component referred to in the Difficulty Review, Item 6. It should be noted that a multiple failure may be recorded in these blocks, (yes/yes), or if a failure did not occur, (no/no).
15)	Defines the failure mode, and if identifiable, the cause is called out. A careful review of the failure mode is made to determine effect on system operation and vehicle effort.

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Defines the system effect. This effect is the result of the failure mode assigned to the component. Defines the vehicle effect. This effect is a result of the failure mode and the result of the system effect. It should be noted that corrective action may be taken whether or not the failure was confirmed. Lists the corrective action. Taken by GDC, the vendor, or both.

SEMERAL BYNAMICS CONVAIR BIVILLON

GENERAL DINAMICS CONVAIR DIVISION

***** 487320 ***** 447407 FAILURE MODE-LEAR. BI MTORAULIC ACCUMULATOR PRESSURE EXMIBITED NO PRESSURE DIFFERENCE DURING THE OIL EVACUATION SES UKNCE. FAILUNG MODE-OUT OF TOLERANCE, BOOSTER HYD ACCUM, PRESS MEASUR, H33P AND HYD, PUMP OUTLET PRESS, MEASUR H3P INDICAT ED AN INITIAL MORHAL PRESS, RISE BUT TO A LOWER (3130 PSIA) THAN MORHAL (3300 PSIA) PEAK AT E.S SEC. THE PAESS, THEN GECAYED TO 8720 PSIA DURING MEXT 1.5 SEC. SPECIFIC CAUSE UNRNOWN BUT SYMPTOMATIC OF UNUSUALLY MEANY DEMAND ON ETSTE BYSICH CFFECT-OPERATION TOO LOW. BOOSTER HYDRAULIC PRESS. LOWER THAN WORMAL FOR A TIME PERIOD OF -2.3 SEC TO 1.5 SE VEHICLE BITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO BYSTEM EFFECT-POSSIBLE CONTAMINATION, ALTHOUGH THE FAILURE MODE INDICATES THE POSSIBILITY OF AIR IN THE BOOSTER MYD Rualic System, system performance was batisfactory. FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. TEST WAS RUM MITHOUT BOOSTER MYDRAULICS BECAUSE SOOSTER MPU COULD MOT SE OPERATED REMOTELY. THIS WAS MOTED DURING AUTOPILOT FINAL CHECAS. PA66 3449 CORRECTIVE ACTION-MOME. THE POSSIBILITY OF CONTAMINATION WAS NOT CONFIRMED BY ANY OTHER TELEMETRY DATA. **2** 8 ÷ 2 g g ₽ ₽ CORRECTIVE ACTION-BOOSTER HPU HAND VALVE, MICROSWITCHES VS AND VS ADJUSTED TO MAKE MIPER CONTACT. 580 \$30703 690603 1110 417013 49/CZZM65-015-0A1047-/L4-7MO-61-71 COMPOBITE-FRD/DPL 7107 BIFFICULTIES REVIEW-HYDRAULIC SYSTEM-AIRBORNE COMPOSITE-FAU/DPL DIF DATA BOURCE PART NUMBER 7161 COMACCIIVE ACTION-SCOOTER HYDRAULIC FILL AND BLEED PERFORMED. TEST/REPORT NUMBER 50C/BRF65-038/B2-401-00-177 10C/8KF43-044/01-401-00-19 C. NO ABVERSE EFFECT NOTED ON SYSTEM PERFORMANCE. FTA8887/P6-W0-01-GAC8 SYSTEM EFFECT-OFERATION DOES NOT START. CORRECTIVE ACTION-MONE. VEHICLE EFFECT-MOME. VEHICLE EFFECT-HOME VEHICLE EFFECT-NOME 108-111EX HADBAULIC-A/6 HYDRAULIC-A/B HTDRAULIC-A/B BYDBAU IC-A/B 8005 TCA 80037CR 80087EA

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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	VEHICLE BITE PRI VENDOR MANE DATE DIP TIME BIF OTH VENDOR PART NO											84D B1 NO 830809 NO NABILICAL PIDGIF CAUSED OFEN CIRCUIT.	IMAL.		TES CANNON						374
	16 PR 1	# Q					ğ 0					NO NO NO	TO INTER		16.8	ş					
		*					*					1 1 00	ANSFEA		2						
	DATE D	61D 650624					40D 4505£1					840 830808 VB11164	POLES 13		8	308033	i				
	DIF DATA SOURCE PART NUMBER	COUNTDOM	NAT ON LAP.				COMPOST TE-PRD/DPL	1 LOOP TEST.				COMPOSITE-PRD/DPL, 7-41015 KNT, HISSILE SIDE OF	PAILED TO ARM AFTER		COUNTDOM		I'CH INDICATION ON THE				•
ATTENDED TO STATE OF THE STATE	TEST/REPORT NUMBER FAILED COMPONENT NAME	SOM-BOF01/BE-401-00-61 COMECTOR	FAILURE MODE-FAIL DURING OPERATION. INTEGRATOR MULLING PAULT ON LAP.	MALOS SIGNALS.	ABORTED.	TOR REPAIRED.	83-4NO-01-44 CORRECTOR	O OPERATE. SIMBAL TEST PAIL RED DURING LOOP TEST.	DOES NOT START.	OBITE ABORTED.	į	B1-4H-01-64 UMBILICAL 7-41015 O OPENATE AT PRESCRIBED TIME, PIN 83 BENT, HISSILE BIDE OF	STATEN EFFECT-OPERATION DOES NOT START. PLIGHT PROGRAMMER FAILED TO ARM AFTER FOMER TRANSFER TO INTERNAL.	DELAY AND RESCHEDULED.	TON REPAIRED. AESE-0728/83-408-00-08	COMMECTOR	C OPERATION, INTERMITTENT BOOMER & PITCH INDICATION ON THE LAFT.	IC OPERATION.	I ABORTED.	LUG REPLACED.	·
	8757EH 808-8757EH	AUTOFILOT-ROUND-A/B	FAILURE MODE-FAIL DURING	SYSTEM EFFECT-IMPROPER ANALOG SIGNALS.	VEHICLE EFFECT-COUNTDOMN ABORTED.	CORRECTIVE ACTION-CONNECTOR REPAIRED.	AUTOPILOT-ROMD-A/B	FAILURE MODE-FAIL TO OPE	BYSTEH EFFECT-OFERATION DOES NOT START.	WENTELE EFFECT-COMPOSITE	CORRECTIVE ACTION-LARRICHA	AUTOFILOT-RCMB-A/B FAILURE MODE-FAIL TO OPE	STREEN EFFECT-OFERATION	VEHICLE EFFECT-COMPOSITE DELAY AND RESCHEDULED.	CORRECTIVE ACTION-CONNECTOR REPAIRED.			BYBIEH EFFECT-ERRATIC OF	VEHICLE EFFECT-COUNTDOAN ABORTED.	CORRECTIVE ACTION-PLUE R	

A.,

CONVAIN DIVISION

CIPTICULTIES REVIEW-AUTOFILOT BYBTEW-AIRBORNE

SYSTEM SUG-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART HUMBER	VEHICLE BITE DATE DIF TIME DIF	BITE PRI	I VENDOR NAME H VENDOR PART NO	
AUTOFILOT-ROUND-A/B	AE62-0211/84-401-00-82	COUNTDOMN	950 93 620418	7E 8		******
FAILURE MODE-FAIL DURING R AND VERKIER EMGINE YAM	FAILURE MODE-FAIL DURING OPERATION, LOOP TEST FAIL EVIDENCED BY LOOP TEST FAULTS ON LAUNCH AMALYST PANEL. (SUSTAINE) AND VERKIER EMGING YAM PAULTS).	SY LOOP TEST FAUL	TS ON LAUNCH	AMALYBT	PANEL. (BUSTAINE	
SYSTEM EFFECT-OPERATION	TION STOPS PRESATURELY.					
WHICLE EFFECT-COUNTDOWN DELAYED.	F DELAYED.					
CORRECTIVE ACTION-UNKNOWN.	·					
AUTOFILOT-ROAD-A/B	AES2-0118/83-401-00-129 UMBILICAL	countboan	1290 B-8	S OF	• .	104110
FAILURE MODE-FAIL TO OPE	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. LOOSE UMBILICAL PIDDIP-	.1CAL P1001P.				
SYSTEM EFFECT-OPERATION	TION DOES NOT START. PLISHT CONTROL INTEGRATOR MALL NO-GO DURING LOOP TEST.	HATOR WALL NO-GO D	UNING LOOP T	Cat.		*
VEHICLE EFFECT-COMPOSITE DELAYED.	C DELAYED.					
CORRECTIVE ACTION-TIENTE	WIDED LOBILICAL.	*	Came of the section o		er en 24 europe – men er	Territoria de la composición del composición de la composición de la composición del composición de la composición del composición de la composición del c
AUTOPILOT-ROLAG-A/B	AESE-0318 UBGILICAL	CCHPOST TE-PRD/DPL	1290 B-3	ž č	• -	*04.00
FAILURE MODE-FAIL TO OPE	FAILURE MODE-FAIL TO GPERATE AT PRESCRIBED TIME, LOGGE UMBILICAL PIDDIP.	JCAL P1001P.				
SYSTEM EFFECT-OPERATION	TION DOES NOT START. PLICHT CONTROL INTEGRATOR FAULT DURING LOOP TEST	HATOR FAILT DURING	1637 9001			
WEHICLE EFFECT-COMPOSITE DELAY.	E DELAY.		-			
CORRECTIVE ACTION-TIGHTED	GHTDED UMBILICAL.					
AUTOPILOT-ROUND-A/B	AES1-5107/88-408-00-88 U-811/51	COUNTDOM	931110	ş	• .	*****
FAILURE MODE-FAIL DURING	FAILURE MODE-FAIL BURING OPERATION. LODGE LABILICAL CONTACT CAUSING OPEN-CIRCUIT.	CAUSTING OPEN-CIRCU	17.			
SYSTEM EFFECT-INPROPER D	SYSTEM EFFECT-INFRICPER DISCRETE SIGNALS. STASING FAULTS DURING LOOP TEST.	ING LOOP TEST.				
MENTELE EFFECT-COUNTDOM	WENICLE EFFECT-COUNTDOIN DELAYED AND RE-SCHEDULED.					
CORRECTIVE ACTION-LARRIDAM.	i					

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		INDE SELTOTIALS	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	Ĭ				
	\$7576x \$16-87876x	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	11 ME D19	# 5 # 5	BITE PRI VENDOR NAME TIME DIP OTH VENDOR PART NO	8
	AUTOPILOT-ROUGS-A/B	AK81-0848/82-401-00-89	Plen	950 910324	~ 0	្តិ		*****
	FAILURE MODE-OUT OF SPE AND THEODOLITE DATA. INV	FAILURE MODE-OUT OF SPECIFICATION. THE WEHTELE PITCHOVER WAS IN EXCESS BY 4.05 DELREES. THIS WAS YER AND THEODOLITE DATA. INVERTER VOLTAGE AND FREQUENCY COULD ACCOUNT FOR ONLY D.84 DELREE OF THE EXCESS.	VER WAS IN EXCESS BY 4.03	DELAEES. DELAEE OF	THIS MAS	, E	DELREES. THIS WAS VERFIED BY RADAR DELREE OF THE EXCESS.	
	BYSTEN EFFECT-OPERATION	BYATEN EFFECT-OPERATION TOO HISM. PITCH ONER HATE EXCESSIVE BY 7 PERCENT.	EBSIVE BY 7 PERCENT.		1			-
	VENICLE EFFECT-INPROPER REATER DISPERSION THAN M	WENICLE EFFECT-IMPROPER TRAJECTORY. ALTHOUGH REENTRY WENICLE IMPACT MAS BATISPACTORY, ENCESSIVE PITCH OVER CAUSED 6 REATER DISPERSION THAN HONIMAL FROM PLANMED FLIGHT TRAJECTORY.	WEHICLE IMPACT WAS BATISF.	ACTOMY, EM	ESSINE P	Ş	OWER CAUSED	•
	CORRECTIVE ACTION-NOME.							·,_
	AUTOPILOT-KOMO-A/B	AE80-0388/FC-4CO-01-73 HARNESS	COMPOST TE-FACTORY	730	013	3 S		088880
	FAILURE MODE-FAIL DURING L B OF THE SANBORN RECORD . INTERMITTANT GROUNDING	FAILURE MODE-FAIL DURING OPERATION-WERNIER ND. E PITCH/ ROLL PEEDBACK TRANSDUCER WALAGE WAS NOT RECORDED ON CHANNE. L B OF THE SANGORN RECORDER DURING THE COMPOSITE TEST, VISUAL OBSERVATIONS INDICATED ERRATIC MONEMENTS OF THE ENGINE . INTERMITTANT GROUNDING OCCURED AT THE SPLICE NEAR THE FEEDBACK TRANSDUCER PLUS (PROT STAIL).	// MOLL FEEDBACK TRANSDUCE VIBUAL GBSERVATIONS INDIC FEEDBACK TRANSDUCER PLUE	A VOLTAGE ATED ERRAT	MAS NOT I	PECOR CNTS C	JED ON CHANN	
	SYSTEM EFFECT-ERRATIC OFERATION.	PERATION.						
	VEHICLE EFFECT-COUNTDOIN	WEHICLE EFFECT-COUNTDOMM, COMPOSITE DELAYED OR RESCHEDULED. POST COMPOSITE TESTING REQUIRED.	ULED. POST COMPOSITE TEST	ING REQUIR	ė			
	CORNECTIVE ACTION-MARNES	CORNECTIVE ACTION-HARNESS WAS RENCHRED AND THE GROUNDING WAS ELIMINATED.	NG NAS ELIMINATED.					***************************************
	AUTOPILGY-ROING-A/B	A2M-27-314/FC-4CO-01-27	COMPOSE IE-FACTORY	275 \$90713	2 2	2 9		-
	FALLINE MODE-FAIL TO CHE THE TEST. THIS MAS ATTRIE	FAILURE MORE-FAIL TO OPERATE AT PRESCRIBED TIME, THE SUSTAINER ENGINE REMAINED AT THE POSITIVE YAM LIMIT THROUGHOUT THE TEST. THIS MAS ATTRIBUTED TO AN OPEN CIRCUIT POUND IN THE GSE.	STAINER ENGINE REMINED ! IN THE GRE.	17 THE POST	72 WE YAN	Ĩ	THROUGHOUT	·
	SYSTEM EFFECT-INTROFER ANALOG SIGNALS.	MALOS BIGNALS.						·
	VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED. A PARTIAL COMPOSITE RETEST WAS PERFORMED.	TE RETEST WAS PERFORMED.					
1	CORRECTIVE ACTION-68E MAS REPAIRED.	B REFAIRED.						 -
	AUTOPILOT-ROLND-A/B	FTA1323/P1-203-00-9	PRF.	=	7.	123		-
	PA" URE MODE-OUT OF TOLER	TOLERANCE. DURING THE RATE 6TRO CHECK VIBRATIONS OF 28-38 CRA AND 4-10 CM.	S VIDRATIONS OF 28-38 CF	561027	2		•	
	SYSTEM EFFECT-NONE.					Š	ġ	
	WHICLE EFFECT-HOME.							······································
- 1	CORRECTIVE ACTION- UNKNOWN.							
							PARE DOOR	
	•		the delivery of the second sec	The second line of the second		the same of the same of	#505 #BEL-	_

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

\$7.57EN \$1.60 - 57.57EN		TEST/REPORT HUMBER FALLED COMPONENT MANG	DIF DATA BOURCE PART HUNDER	VEHICLE DATE DIF	\$17E 719E 01F	# 0 # E	VENDOR MANE	
AUTOFILOT-ROUND-A/B		F1A4252/P4-201-00-04	FRO	90000	14-	ž d		
FAILURE MODE-EPRAT GE AMPLITUDE E.E CT TEST MAS REGUIRED	TIC OPEI	FAILURE WOE-EPRATIC OPERATION. MECHANICAL FEED BACK FROM THE VERNIER ENGINES TO THE ROLL RATE GYRO RESULTED IN LAR ME AMPLITUDE E.E. CPS OSCILLATIONS IN ALL CHANNELS. THIS OCURRED DURING THE LOOP TEST AND WAS BO SEVERE A SECOND LOOP TEST WAS REQUIRED TO EVALUATE AUTOPILOT OPERATION.	HE VERNIER ENGINES RED DURING THE LOOP	TO THE RO TEST AND	LL RATE	GYRO REBULTED REVERE A BECO	IN LAR	
SYSTEM EFFECT-ERRA	ATIC OF	ATIC OPERATION. LARGE AMPLITURE 2.2 CPS OSCILLATIONS IN ALL CHANNELS BURING THE LOOP TEST.	CILLATIONS IN ALL C	HAWELS D	URING TH	C LOOP 7E8T.		3-11-11- -3-11- j -
YENICLE EFFECT-CO.	KANTDOM	VEHICLE EFFECT-COUNTDOMN DELAYED. PROBLEM OCCURRED DURING A HOLD AND RESULTED IN AN EXTENSION OF INFINED ANOMIT.	HOLD AND RESULTED	IN AN EXT	ENSTON Q	THE HOLD OF UNDETE	UNDETE	
CORRECTIVE ACTION-NOME.		THIS MAS NOT CONSIDERED A PLIGHT PROBLEM.	CBLEM.					
AUTOP1LOT-ROUND-A/B		60C/8KF65-0HS/81-401-00-183	P.1647	1830	MTR 355	7E8 60C NO		3
FAILURE MODE-FAIL TO A COMMON OCCURRENCE, TO REPEAT ITS CYCLE.	TO CEA	FAILURE MOE-FAIL TO CEASE CPERATION AT PRESCRIBED TINE, PROGRAMER RECYCLED AT SOME TIME AFTER VECO, THIS HAS BEEN A COMMON OCCURRENCE, CAUSED BY OVERLAMPING TOLERANCES ON TWD CAM OPERATED BAITCHES WHICH CAUSED THE REAL TIME SHAFT TO REPEAT ITS CYCLE,	PROGRAMMER RECYCLED AT SONE TINE AFTER TND CAN OPERATED SMITCHES WHICH CAUSED	T 304E TE	A CAUSED	VECO. THIS HAS BEEN THE REAL TIME SHAFT	AS BEEN E SHAFT	
SYSTEM EFFECT-IMPROMER ANALOG SIGNALS.	PROPER AL	MICE STEMUS.						
WENTCLE EFFECT-LOS A COUNTER CLOCKWIT	SS OF W	VENICLE EFFECT-LOSS OF VENICLE STABILITY. PROGRAMMER RECYCLING RESULTED IN RE-VENTING OF ENSINE TANKS MAICH INDUCED A COUNTER CLOCKWISE ROLL RATE OF 2.8 DEGREES PER SECOND TO THE VENICLE AT 358-4 SECONDS.	ING RESULTED IN RE-	VENTING OF	F CN:11K	TAIRS WHICH	1MDUCED	
CORRECTIVE ACTION-NOME.		THIS IS NOT CONSIDERED A PROBLEM.						
AUTOFILOT-ROUND-A/B		98-98-04-4455-P	84.84.44.48	6 30924	FACTORY	YES 40/C NO		****
FAILURE MODE-FAIL CRACE, IT MAS REPOS SUBMITTED FOR ANAL	DURING SETED TH	FAILURE HODE-FAIL DURING OPERATION. THE PITCH-E ASSEMBLY REPORTEDLY FAILED DURING MANUFACTURING TESTS OF THE TOP PA CKAGE. IT MAS REPORTED THE PROGRAMMER FAILED A SHOCK TEST. FAILURE AMALYSIS FUNCTIONALLY TESTED THE PITCH-E ASSEMBLY SUBHITTED FOR AMALYSIS. THE REPORTED FAILURE COULD NOT BE CONFIRMED UNDER STATIC VIBRATION OR SHOCK CONDITIONS.	REPORTEDLY FAILED DURING MANUFACTURING TESTS OF THE TO FAILURE AMALYSIS FUNCTIONALLY TESTED THE FITCH-E ASSE CONFIRMED UNDER STATIC VIBRATION OR SHOCK CONDITIONS.	CTIONALLY IC VIBRAT	ACTURING TESTED TON OR SE	TESTS OF THE THE PITCH-E A FOCK CONDITION	100 PA 335 MBLY NS.	
CORPECTIVE ACTION-SINCE	1-81MCE	CORPECTIVE ACTION-SINCE THERE WAS NO FAILURE OF THE PITTH 2 ASST. AND BINCE ASSOCIATED CIRCUITY WAS NOT SUBMITTED IN AMALYSIS. NO FURTHER ACTION TAKEN.	ASST. AND BINCE AS	BOC IA TED	CIRCUITY	WAS NOT SUBM	11169 .	
AUTOFILOT-ROUND-A/B		ZZH63-0£1/DA843/L£-4MO-01-139 PROGRAPECR	COMPOST TE-PRD/DPL. 87-41001-878	1390	*	YES 60/C		
PAILURE HODE-PAILE	ED DURT	ED DURING OPERATION, PROGRAMMER FAILED.						,
STATEN EFFECT-1989	G G340H	eretem eppect-suproped discrete bishals. Caused intermittant scooter jettisch bishal.	T BOOSTER JETTIBON	816MAL.				
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STSTEM SUG-STSTEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	817E	PRI VENDO	VENDOR NAME VENDOR PART NO	
WENICLE EFFECT-COMPOSITE DELAYED	OCLAYCO.	and a second contract of the second contract					15010
CORRECTIVE ACTION-PROGRAMMER REPLACED.	MER REPLACED. (PR-VD1875P).		-				
AUTOPILOT-ROMG-A/B	A-88-64-4811F	FAR 7-41011-985	1540	FACTORY	YES 50/C		992742
FAILURE MODE-OUT OF TOLERANCE, IN CALIBRATED ON LOW BIDE OF M-WIMAL IB CALIBRATED MEAR MOMINAL VALUE,	OF TOLERANCE, INTEGRATOR NOTOR STOP VOLTAGE OUT OF SPEC. FAILURE HAS DUE TO PROGRAMMER HAVING BEEN I SIDE OF M-MINAL. TOLERANCE BAND ON STOP VOLTAGE IS ADEBUATE TO COVER BHIFT DUE TO NARM UP IF UNIT R HOMINAL VALUE.	EE OUT OF SPEC. FAIL VOLTAGE IS ADEQUATE	URE WAS DU	E TO PROSE	TO MARK UP II	ING BEEN	
CORRECTIVE ACTION-PACTORY	CORRECTIVE ACTION-PACTORY PERSONNEL VERE INFORMED TO ADJUST INTEGRATOR STOPS AS LEGGE, TO MOTIONAL	T INTEGRATOR STOPS A	LLUOK. 10				
AUTOFILOT-ROUND-A/B PROGRAMMER	A-A8-04-4198-P	FAR 7-41011-005	630404	FACTORY	9 9 9		101101
PAILURE HODE-FAILED TO OPERATE AT PRE.	ERATE AT PRESCRIBED TIME, PROGRAMMER WOLLD NOT REMET TO ZENO DURING HIBBILE FIMAL CHECKOUT TO BE APOME.	MER WOLLD NOT RESET	TO ZENO BU	A1146 H1551	11E FIMIL	CHECKOUT	
CORRECTIVE ACTION-APONE T	TEST GAUSMENT TROUBLE CORRECTED.	,					
AUTOFILOT-ROUND-A/B PROGRAMECE	1—29—04—4224F Harique	FAR 7-41011	1630	FACTORY	7E\$		1177
FAILURE MODE-ELECTRICAL O M WIRE IN MARKESS.	FAILURE HODE-ELECTRICAL OPEN. CAN WAS REJECTED FOR LOW YAW WERHIER EMGINE CONTROL GAIN. FAILURE WAS CAUSED BY BROKE 1 WIRE IN HAMESS.	WENTER ENGINE CONT	ROL SAIN.	FAILURE &	s CAUSED	BY BROKE	
CORECTIVE ACTION-FACTORY	CORRECTIVE ACTION-FACTORY PERSONNEL TO NAMOLE COMPONENT MITH CARE.	TH CARE.					
AUTOPILOT-ROIND-A/B PROGRAMMER	A-89-D4-5483-F ROLL INTECRATOR HOTOR	7-41011-003	1500	FACTORY	VES HO		£773
FAILURE NODE-CUT OF TOLER NAS TRACED TO FAULTY ROLL RESISTANCE SHOULD HAVE BE	OF TOLERANCE. THE PROGRAMMER WAS IR/D FOR FAILING TO RESPOND TO HIGH-SIDE VOLTAGE INPUTS. FAILURE. TY ROLL INTEGRATOR MOTOR. FAILURE ANALYSIS FOUND A LOM REISTANCE BETWEEN PINS R AND 4 OF 40 CHMS HAVE BEEN 150 ONHS. NO BURNED SECTIONS OR OTHER DISCREPANCIES WERE FOUND.	FAILING TO RESPOND 8 FOUND A LOW RESIST R OTHER DISCREPANCIE	TO HIGH-SI ANCE BETHE S NENE POL	DE VOLTAGE EN PINS R NO.	AND 4 OF	PAILURE 40 ONNS.	
CORRECTIVE ACTION-NOME. C	CORRECTIVE ACTION-NOME. CAUSE OF FAILURE HODE NOT FOUNG.			ensuf sin sin sidificultaryenin			
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SENCY. DYMANICS CONVAIR DIVISION

	7.7 E E F T . E	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	¥			
STETEN SLB-STSTEN	TEST/REPORT NUMBER FAILED COMPONENT MANE	DIF GATA SOUNCE PART NUMBER	EMICLE	DITE PRI	I VENDOR NAME	r
AUTOFILOT-ROUGS-A/B PROGRAHMER	A-AB-D4-3463-F Transporker	FAR 7-41011-005		FACTORY YES	FACTORY YES	0
PAILURE MODE-OUT OF SPECI-OVER IN POS. YAW DIRECTION ASSENDLY (P/N T-41640), W	FAILURE MODE-OUT OF SPECIFICATION. THE PROGRAMMER- INTEGRATOR-AMPLIFIER CANISTER WAS IR/D WHEN B-S ENGINE WENT MARD -ONCH IN POS. YAW DIRECTION. AMALYSIS SHOWED WIRE FROM TRANSFORMER TEDS PIN AS WAS HISWIRED TO PIN 136 OF THE PLATE ASSENDLY (P/N T-41480). WIRE WAS COMMECTED TO PROPER PIN (PIN 138) AND HORMAL OPERATION WAS RESTORED.	M-AMPLIFIER CANIST ORMER TEGS PIN 43 N N 1383 AND MORMAL	ER WAS IR/D WE HISWIRED PPERATION WA	HEN B-1 TO PIN 1 FRESTORE	ENGINE MENT NAR 16 OF THE PLATE 1.	
CORRECTIVE ACTION-INSPECTI	MAPPECTION SUPERVISION IMPRESSED COGNIZANT PERSONNEL MITH THE IMPORTANCE OF	PERSONNEL MITH THE	IMPORTANCE	OF CORREC	CORRECT WIRING,	
	AEEE-C481/BE-402-D0-141 S417O:	P.1647	1410 B-2 620712 0.			20 75 60
FAILINE MODE-FAIL TO OPERA GREATLY ATTEMNATED, DUE TO IM A COMMECTOR ON MARNESS,	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. DURING THE FIRST SO SECONDS OF PLIGHT, EMSINE RESPONSE IN YAW WAS REATLY ATTEMBATED, DUE TO FAILURE OF PROGRAMMEN SWITCH AS: THE YAW GHANNEL STABILIZATION FILTER OR AN OPEN CIRCUIT	THET SO SECONDS OF	PLISHT, EM	THE RESPO	USE IN TAN MAS	
STRIN EFFECT-IMPROPER ANALOG SIGMALS. YAM CONTROL ACQUITID. SYSTEM PERFORMANCE MAS THEN SATISFACTORY.	LOG STEMLE, YAW CONTROL WAS MARSIN E MS THEN SATISFACTORY.	WAS MARSIMAL LAVIL SO SECONDS LMEDH THE FILTER OUTPUT SIGNAL MAS	WENTHE F	ILTER OUT	UT BIGME MB	
WHICLE EFFECT-HOME. ACQUI		MAS SATISFACTORY P	ON OWER-ALL	MI BAICH	CCOMPLIBMENT.	
3						
AUTOFILOT-ROMD-A/B BP PROGRAMMER CU	88-49-04-3231F CURRENT LINITER	FAR	1600 FACTORY GEOGES	2 2		
FAILURE MODE-OPEN (ELECT) N RRENT LINITER IN SM 54 AS AR	FAILURE MOSE-OPEN (ELECT) NO GUTPUT-DURING PROGRAMER CHECKOUT BMITCH 14 NAD NO GUTPUT. FAILURE CAUSED BY AN OPEN-CU MENT LINITER IN SM 14 AS ARESULT OF EXCESSIVE CURRENT.	SWITCH 14 NAD NO CA	JIPUT. PAILU	E CAUSED	BY AN OPEN-CU	
CORRECTIVE ACTION-FUSE MOLDS	CORRECTIVE ACTION-FUSE HOLDERS IN SIMULATION CHECKOUT ERUIPMENT MERE REPLACED BY A LICOR ASS.	T MERE REPLACED BY				
AUTOFILOT-ROUND-A/B HG- PROGRAMMER	7A1	FAN 62 F7-41D01-967	SEDSOS FACTORY	7 TES	E MOLDER.	4 8 5 7 8 9
FAILUME MODE-FAIL DURING OPE	FAILUME MODE-FAIL DURING OPERATION-BUSTAINER CUTOFF BIGNAL FAILED.	ė				
CORRECTIVE ACTION-UNKNOWN, FAILURE UNCONTINED.	ATLUME UNCOMFIBUED.				And an industry of the second	
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	F TIME DIF OTH VENDOR PART NO	FACTORY VES 60/C	ID NOT OCCUR DURING PROCRANCE	NORTON YES BELOCK 1857. NO 211-182	IN 4 OF MELAY NSTE SHORT CIRC	CALLED TO BE REMOVED BY A DRA	NORTON YES BELOCK NO 211-102	ENT OF TIMER SHITCHES. A POSS	NED OF THE REBULTS OF THIS ANA	NORTON YES BELOCK NO R11-188	ENT OF TIMEN SMITCHES. A POSS
ž	VEHICLE DATE DIF	600039	SIGML DI	66 0322	AD FROM P	MAE WAS	4803EE	TSUL GAS I	ERE ADVIS	66 03 8 0	I SADJUST
DYNAMICS SIVISION TOPILOT SYSTEM-AIRSO	DIF DATA BCURCE PART NUMBER	7AR 27-41626-3	AINER ENGINE CUTOFF	FAR	OPERATE DUE TO A LE	OF THE MOTOR START	7AR 7-1011-977	READOUTS INDICATED M MALFUNCTION.	RION AFB PERSONNEL W	FAR 7-41011-877	READOUTS INDICATED H
GENE DYNAMICS CONVAIR DIVISION BIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TEST/REPORT HUMBER FAILED COMPONENT NAME	T8-88-04-3RR8T	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. THE BUSTAINER EMBINE CUTOFF SIGNAL DID MOT OCCUR DURING PROGRAMER CCEPTANCE VIBRATION TESTING.	A-10C-04-3446-F	FAILURE HODE-SHORT GLECT). THE BEQUENCER HOTOR FAILED TO OPERATE DUE TO A LEAD FROM PIN 4 OF RELAY K372 SHORT CIRC	CORRECTIVE ACTION-THE CASE SCREW WHICH CUT THE INSULATION OF THE MOTOR START WIRE WAS CALLED TO BE REMOVED BY A DRA	A-IDC-D4-3448-F ZERO SEGUENCE TIMER SMITCHES	FAILURE MODE-CUT OF TOLERANCE. DURING CAPCHE TEBT, OCTAL READOUTS INDICATED HISADJUSTNENT OF TIMER SHITCHES, A POSS IBLE CAUSE OF THE OUT OF TOLERANCE INDICATION WAS A CAPCHE MALFUNCTION.	CORRECTIVE ACTION-NOME. THE FAILURE WAS NOT CONFIRMED. NORION APS PERSONNEL WERE ADVISED OF THE RESULTS OF THIS ANA	A-10C-04-3447-F ZERO BEBUENCE TIMER BATTCHES	PAILUME HODE-OUT OF TOLERANCE. DURING CAPCHE TEST, OCTAL READOUTS INDICATED MISADJUSTHENT OF TIMER "MITCHES. A POSS IBLE CAUSE OF THE OUT OF TOLERANCE INDICATION WAS A CAPCHE MALFUNCTION.
9941 MAT 81	SYSTEM SUB-SYSTEM	AUTOFILOT-ROUD-A/B PROGRAMER	FAILURE MODE-FAIL TO OPERATE ACCEPTANCE VIBRATION TEATING.	CORECTIVE ACTION-UNENDAM. FAILURE UNCONTRRED. AUTOFILOT-ROUND-A/8 A-10C-04-3446-F A-10C-04-3446-F	FAILURE MODE-SHORT CELEC	CORRECTIVE ACTION-THE CA	AUTOFILOT-ROUND-A/B PROGRAMMER	FAILURE MODE-OUT OF TOLE IBLE CAUSE OF THE OUT OF	CORRECTIVE ACTION-MOME.	AUTOFILOT-ROUND-A/B PROGRAMMER	PAILURE HODE-OUT OF TOLE HALE CAUSE OF THE OUT OF

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CORRECTIVE ACTION-HOME. THE PAILURE HAS NOT CONFIRMED. MONTON APS PERSONNEL WERE ADVISED OF THE RESULTS OF THIS AMA LYSIS.

GENERAL BYNAHICS CONVAIR BIVIBION DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBOKHE

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BYBTEN BUB-BYBTEN	TESTAEPORT NUMBER FAILED COMPONENT MANE	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIP	817E 71ME 01F	VEHICLE SITE PRI VENDOR PART NO	9
AUTOPILOT-ROUND-A/B PROGRAINER	AD42-0021/DA476/L2-401-00-112	COUNTDOMM 27-41001-878	11ED	PALCS -R	VES 60/C	******
FAILURE MODE-FAIL TO OPE	IL TO CHEMATE AT PRESCRIBED TINE AUTO PILOT PROGRAMMEN PAILED TO BTART ON COMMAND DURING TASK SI.	PROGRAMMEN PAILED TO	START OF	COMMAND	DURING TASK 11.	·
SYSTEM EFFECT-OPERATION	PERATION DOES NOT START.					
VEHICLE EFFECT-LAUNCH AT	VENICLE EFFECT-LAUNCH ATTEMPT ABORTED AND RESCHEDULED.					
CORRECTIVE ACTION-UNKNOWN, (FAR 90-04-3135)	a. (FAR SD-D4-B188)					
AUTOFILOT-ROUD-A/B PROGRAHEER	A-88-04-3256-C	FAR 27-40964-3	62 0112	FACTORY	YES 60/C HO	******
FAILURE MODE-PREMATURE C	FAILURE MODE-PREMATURE OPERATION-PITCH PROGRAM OCCURRED EARLY DURING PROGRAMMER CHECKOUT.	LY DURING PROGRAMMEN	CHECKOUT	·		
CORRECTIVE ACTION-LAKNOWA.	* :				American Aprilla American politica (materican politica e formate	1
AUTOPILOT-ROUND-A/B PROGRAMMER	A-\$\$-04-3237-C	FAR 27-41428-3	\$20112	FACTORY	YES 60/C NO	664333
FAILURE MODE-PREMATURE O	FAILURE MODE-PREMATURE OPERATION-PITCH PROGRAM OCCURED EARLY DURING PROGRAMENT CHECKOUT.	Y DURING PROGRAMEDE C	HECKOUT.	v		
CORRECTIVE ACTION-UNKNOWN.						_
AUTOFILOT-ROMD-A/B PROGRAMER	GR-04-194 Relay/34/1 Toh	FAR 7-41011-993	920 912000	MT.	7E3 NO	
FAILURE MODE-ELECTRICAL YCLE TO ZERO POBITION. RE GAGED.	ECTRICAL SHORY. TING-DURING AN APCHE HYDRAULIC FILL AND BLEED PROCEDURE THE PROGRAHMEN FAILED TO REC ITION. RELAYS #354 AND #331 MAD HIGH RESISTANCE AND SMITCH \$573-\$ MAS FOUND TO HAVE BEEN IMPROPERLY	IC FILL AND BLEED PROCEDURE THE NCE AND BHITCH 8373-6 WAS FOUND	OCEDURE 1	HE PROGRA	PROGRAMMER FAILED TO RE. TO HAVE BEEN IMPROPERLY	<u>u</u>
CORRECTIVE ACTION-ACTION COTING PROCEDUME,	CORRECTIVE ACTION-ACTION MAS SEEM INITIATED TO AUGMENT THE EXISTIMS PROGRAMMER RENORK AND RE-FURBISHMENT TROUBLE SH DOTIMS PROCEDURE,	EXISTING PROGRAMEN	REMORK AN	D RC-FURB	ISHKENT TROUBLE	<u> </u>

GENE DYNAMICS CONVAIR DIVISION

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DIPPICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

8787EH 848-878TEH	TEST/REPORT HUMBER FAILED COMPONENT HAME	DIF DATA BOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	1 4 0	OH TRAS ROGNEY HTO	
AUTOFILOT-ROUMS-A/B	AN141-0-1-142/FC-4CO-01-142 AMPLIFIER	COMPOST TE-FACTORY 7-41011-003	14ED 611110	. G	7E3 60/C HO	374
FAILURE HODE-FAIL BURING OPERATION- 1 HE LIHIT BURING YAM GYRO TORQUING TEST AMPLIFIER MAS FOUND TO SE BURNED OUT.	FAILUME MODE-FAIL DURING OPERATION- YAW INTEGRATOR FAILED TO RESPOND DURING TEST, ALSO THE BOOSTER ENGINE WENT TO T ME LIMIT DURING YAW GYRO TORGUING TEST, CANISTER REMOVED AND TAKEN TO COMPOWENT AREA WHERE THE "AW INTEGRATOR MOTOR AMPLIFIER WAS FOUND TO BE BURNED OUT,	TO RESPOND DURING TE	NT. ALBO THE BCC AREA WHERE THE	STER EN	GINE MENT TO T EGRATOR HOTOR	
SYSTEM OFFECT-OPERATION DOES HOT STAR WENICLE EFFECT-COMPOSITE RESCHEDLED.	SYSTEM OFFECT-OPERATION DOES NOT START- BURNED OUT INTEGRATOR NOTOR AMPLIFIER PREVENTED TEST FROM STARTIME. WENICLE EFFECT-COMPOSITE RESCHEDULED.	IOR HOTOR AMPLIFIER	MEVENTED TEST P	RON 87A	A71146.	
CORRECTIVE ACTION-THE NEW	E BERVOAMPLIFIER/INTEGRATOR/PROGRAMMER CANISTER WAS REPAIRED AND REIMSTALLED ON THE HIBSILE.	CANISTER WAS REPAIR	ID AND REINSTALL	8 8	HE HISSILE.	
AUTOFILOT-ROAD-A/B PROGRAMMEN	AE61-0964/FCA-4CO-0E-140 CALIBRATOR	COMPOSITE-FACTORY	140D 610929	ž 6		
FAILURE MODE-OUT OF TOLES	TOLERANCE. CARD 162 (367 AND MEASURE TEST ROLL VOLTAGE) INDICATED A NO-60 LOM.	187 ROLL VOLTAGE) IN	HCATED A NO-60	į		
SYSTEM EFFECT-OFERATION	ION TOO LOW- LOW ROLL VOLTAGE OUTPUT PROS PROGRAMMER.	ION PROGRAMMER.				
WENTELE EFFECT-COMPOSITE RESCHEDULED.	RESCHEDULED.					
CORRECTIVE ACTION-PROGRAMMER REPLACED.	MER REPLACED.					
AUTOPILOT-ROUND-A/B PROGRAMER	AF61-09441/FCA-4CO-02-14D COMECTOR	COMPOSITE-FACTORY	1400	YES 100		:
FAILURE MODE-PAIL 10 OPER ATED NO-60 HIGH. COMMECTOR	OPERATE AT PRESCRIBED TIME- DECK 18-708, CAPDS ER AND R3 (CHECK BMITCHES 83 AND 88 OPEN) INDIC ECTORS P301: AND P303 OF PROGRAMMER BERNO CANISTER WEME LOOSE.	IG. CAPDS EE AND ES NO CANIBTER WERE LOD	CHECK BULTCHES JE.	3 40	Se OPEN INDIC	
BYATEH EFFECT-OPERATION D	ION DOES NOT START- LOOSE PLUGS ON SERVO CANISTER PREVENTED OPERATION FROM OCCURRING.	IO CANISTER PREVENTE	OPERATION FRO	OCC URB	<u>*</u>	
VEHICLE EFFECT-COMPOSITE RE- CORRECTIVE ACTION-NOT ANDMA	WENTELE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE RERAN. CORRECTIVE ACTION-NOT RADIM.					
AUTOPILOT-ROUND-A/B PROGRAMMER	AE81-0001/7C-4C0-01-141	COMPOST TE-PACTORY	1410 FACTORY 610615	5 5	5/09	
FAILURE MODE-OUT OF TOLEN AS DUC TO AN INFROMER ROLL	TOLERANCE. ALL BOLL TORBUTHE RATES DURING VERHIER ENGINE PHASE HERE LONER THAN EXPECTED. THIS WASCL. TORBUTHE VOLTAGE INPUT.	ING VERNIER ENGINE P	IASE NERE LONER	THAN EX	PECTED. THIS W	
SYSTEM EPPECT-OPERATION 1 N ASE.	ON TOO LON- MOLL TORBUING RATES TOO LON- CAUSED BY IMPROPER SETTING OF ROLL TORBUING VOLTAGE !	M- CAUSED BY IMPROP	IR BETTING OF RC	11 108	UIN WATARE 1	
WHICLE EPECT-COMPOSITE	HITE DELAYED POST-COMPOSINE VESTIMS TO DEMONSTRATE SATISPACTON'S OPERATION.	DEMONSTRATE SATISPA	TORY OFERATION.			
					PACE BODS	

GENERAL DYNAMICS CONVAIR DIVISION

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CONTRACT CONTRACT

DIFFICULTIES REVIEW-AUTOFILOT STREEM-AIRBORNE

	PAGE GOIG			
	IOS WAS NOT BENT.	THE UPPER STACE BY	SYSTEM EFFECT-OPERATION DOESHOT START. THE SIGNAL TO UNCAGE THE UPPER STAGE SYROS WAS NOT SENT.	BYBTEM EFFECT-OPERATION D
,	OPERATE AT PRESCRIBED TIME, THE UNCAGE GYROS FUNCTION DID NOT OCCUR AT VERNIER CUTOFF AS A RES- NSISTORS LOCATED IN THE PROGRAMMER ARDD BINARY CIRCUIT.	STAND FUNCTION DID) OPERATE AT PRESCRIBED TIME, THE UNCAGE GYROS FUNCTION INSISTORS LOCATED IN THE PROGRAMMER AEDD BINARY CIRCUIT.	PAILURE MODE-FAIL TO OPER LLT G. TWO FAULTY TRANSIST
	115D FACTORY YES 610321 FACTORY WES	COMPOST TE-PACTORY	AE61-0188/FC-4CO-02-118 Trans18708	UTOFILOT-ROUND-A/B ROGRANNER
		NUMEROUS RETESTS.	CORRECTIVE ACTION-NONE-PROBLEM COULD NOT BE DUPLICATED ON N	CORRECTIVE ACTION-NONE-PI
	STOTEN INTEGRITY.	OUTRED TO VERIFY AA	WENICLE EFFECT-COMPOSITE BELAYED. COMPOSITE FIX TEST WAS REQUIRED TO VERIFY A/P SYSTEM INTEGRITY.	WENICLE EFFECT-COMPOSITE
			MICO SIGNALS.	SYSTEM EPTECT-INFROMER ANALOG SIGNALS.
	THAN EXPECTED.	RAM STARTED EARLIER	FAILURE HODE-FAIL TO OPERATE AT PRESCRIBED TIME, PITCH PROGRAM STARTED EARLIER THAN EXPECTED.	FAILURE MODE-FAIL TO OPER
	610616 FACTORY YES 610616	COMPOST TE-FACTORY	AE81-0560/FC-4CO-01-125	UTOFILOT-ROIND-A/B NOGRANNER
			CORRECTIVE ACTION-TEST PROGRAMMER TAPES MERE CORRECTED.	CORRECTIVE ACTION-TEST PR
		eureb.	WENICLE EFFECT-COMPOSITE RESCHEDULED. RENUN OF COMPOSITE RESUIRED.	WENICLE EFFECT-COMPOSITE
	Combs of TEST.	ON FROM 75 TO 80 BE	C OPERATION. WERNIER BIAS WOLTAGE TOO LOW FROM 75 TO SO SECONDS OF TEST.	BYSTEN EFFECT-ERRATIC OF
	I UNTIL 80 SECONDS OF THE TEST, THIS	WERE TOO LOW FROM 71	OFFIATION, VERNIER ROLL BIAS VOLTAGES NERE TOO LOW FROM 75 UNTIL SO SECONDS OF THE TEST. INCORRECT TEST PROGRAMMER TAPES.	FAILURE MODE-ERRATIC OPES AMAMOLY MAS CAUSED BY INCO
189783	116D FACTORY NO 6D/C 8:	COMPOSETE-PACTORY	AE61-D275/FC-4CO-01-116	UTOFILOT-ROUND-A/B NOGRAHNER
			TABLELE EFFECT-CONTORTE RESUMBLED. REMOTED. CORRECTIVE ACTION-TEST PROGRAMMER TAPES CORRECTED.	CORRECTIVE ACTION-TEST P
	IC OPERATION, STAGING DISCRETE SIGNAL CHANGED VOLTAGE LEVEL AT SUSTAINER CUTOFF. CAUSED SY INCOR	IANGED VOLTAGE LEVEL	ERATION, STAGING DISCRETE SIGNAL CY	SYSTEM EFFECT-ERRATIC OFF RECT PROGRAMMER TAPES.
	PAILURE MODE-ERRATIC CPERATION, STAGING DISCRETE SIGNAL INDICATED A VOLTAGE DROP AT SUSTAINER CUTOFF, CAUSED BY INC RRECT PROGRAMMER TAPES.	IICATED A VOLTAGE DRO	RATION. STAGING DISCRETE SIGNAL IND	PAILURE MODE-ERRATIC OPET GRRECT PROGRAMMER TAPES.
*****	116D FACTORY NO 60/C 610808	COMPOST TE-PACTORY	AE81-0273/FC-4CO-01-116	UTOFILOT-ROUND-A/B ROGRAINGER
757430			ORBUING VOLTAGE RESET.	CORRECTIVE ACTION-ROLL TORBUING VOLTARE RESET.
٠	VEHICLE BITE PRI VENDOR MANE DATE DIF TINE DIF OTH VENDOR PART NO	DIF DATA SOURCE PART NUMBER	TEST/REPORT NUMBER FAILED COMPONENT NAME	8787EH 848-8787EH

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**** ***	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	OPILOT SYSTEM-ASREGRA	U			ſ
8787EM 846-8787EM	TEST/HEPONT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME SIF	BITE PRI	VENDOR PART NO	
WENTELE EFFECT-COMPOSITY	WENICLE EFFECT-COMPOSITE RESCHEDULED. PROGRAMMER REPLACED AND COMPOSITE RERAM.	AND COMPOSITE RERAM.				•••
CORRECTIVE ACTION-ANOTH	CORRECTIVE ACTION-ANOTHER PROGRAMMER INSTALLED, AND APPLICABLE SYSTEMS LEVEL TESTING WAS PERFORMED.	ABLE BYBTEMS LEVEL TE	STING WAS PE	PORMED.		
AUTOPILOT-ROUND-A/B PROGRAMMER	AES1-0188/FC-4CO-01-115 TRANS1870R	COMPOSETE-FACTORY	1130 FAC	FACTORY VES		****
PAILURE MODE-FAIL TO OF	O OPERATE AT PRESCRIBED TIME. THE UNCAGE GYROS PUNCTION DID NOT OCCUR AT VERNIER CUTOFF AS EXPEC	E GYROS PUNCTION DID	NOT OCCUR AT	VERNIER	CUTOFF AS EXPEC	······································
SYSTEM EFFECT-OFERATION	SYSTEM EFFECT-OFERATION DOESHOT START. THE SIGNAL TO UNCAGE UFFER STAGE GYROS HAS NOT SENT.	E UPPER STAGE GTROS N	AS NOT BENT.			
WENTELE EFFECT-COMPONI	PORTTE RESCHEDULED, RERUN OF COMPOSITE MADE.	ADE.				,
CORRECTIVE ACTION-BUMHITATIVE EVALU BINARY ITHING CODE FOR THE NOSE CONE CIRCUITAY WAS NOT PROPERLY CONNECTED 610521 WHEN SAME PROBLEM REOCCURRED.	CORRECTIVE ACTION-QUANTITATIVE EVALUATION COULD NOT BE ACCOMPLISHED AS TIMING LINES FOR MIDNESTERM RECORDER AND THE BINARY TIMING CODE FOR THE NOSE CONE SIMULATOR RECORDING NERE NOT APPARENT. INVESTIGATION REVEALED THAT THE TIMING CINCULTRY WAS NOT PROPERLY CONNECTED TO THE TEST EQUIPMENT. PROGRAMMER REPLACED ON MEXT CONFOSITE FC-4CO-02-115 DATE 610521 MMEN SAME PROBLEM REOCCURRED.	OMPLISHED AS TIMING L ERE NOT APPARENT, INV PROGRAMMER REPLACED	INEB FOR HID ESTIGATION R ON NEXT COMP	ESTERN CVEALED	TECORDER AND THE PAT THE TIMING 4CO-02-115 DATE	~
AUTOFILOT-ROUND-A/B	AE61-0274/FC-4CO-02-111 TRAMS1STOR	COMPOSETE-FACTORY	111D FAC	FACTORY YES		******
FAILURE MODE-FAIL DURIN PROGRAMMER, TWO EXTRA 1 E TRANSIBIOR IN PROGRAM	FAILURE MODE-FAIL DURING OPERATIUN-DURING THE SECOND PACTORY COMPOSITE TEST, A FAILURE MAS AGAIN NOTED IN THE PITCH PROGRAMMER, TWO EXTRA VOLTAGE CHANGES NERE OBSERVED BETNEEN 75 AND 85 BECONDS FROM PITCH PROGRAMMER START, DEFECTIV E TRANSISTOR IN PROGRAMMER LOGIC.	RY COMPOSITE TEST, A H 75 AND 85 SECONDS F	FAILURE MAS	SEATH NO SERAIDEER	START. DEFECTIV	
SYSTEM EFFECT-INFROPER	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS-TWO EXTRA VOLTAGE CHANGES OBSERVED BETWEEN 75 AND 85 SECONDS.	CHANGES COSERVED BETW	EEN 75 AND 8	9400348	ند	
WENTCLE EFFECT-COMPOSIT	VEHICLE EFFECT-COMPOSITE RESCHEDULED -PROGRAMMER IR/D, REPAIRED, AND A THIRD COMPOSITE TEST MADE ON VEHICLE,	AIRED, AND A THIRD CO	PP-0617E TEST	MADE ON	WEHICLE.	
CORRECTIVE ACTION-PROG	CORRECTIVE ACTION-PROGRAMMER IR/D AND DEFECTIVE TRANSISTOR REPLACED IN PROGRAMMER LOGIC.	REPLACED IN PROGRAM	ER LOGIC.			
AUTOFILOT-ROUND-A/B PROGRAMMER	AES1-0274/FC-4CO-01-511 TRANSISTOR	COMPOSITE-FACTORY	1110 FAC	PACTORY YES		12500
FAILURE MODE-PREMATURE	THE OPERATION-STASING EMBLE OCCURRED 4 SECONDS EARLY. FAILED TRANSISTOR IN LOSIC CIRCUITRY.	SECONDS EARLY. FAILE	D TRANSISTOR	1807 MI	: CIRCUITAY.	
	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS-STASING EMABLE OCCURATED 4 SECONDS EARLY.	URRED 4 SECONDS EARLY	•			terro d'arrèsi
VEHICLE EFFECT-COMPOSIT	WENICLE EFFECT-COMPOSITE RE-SCHEDULED, RE-RUN OF COMPOSITE RESUIRED.	REGUIRED.				
COMMECTIVE ACTICAL PROGE	CORRECTIVE ACTICN PROGRAMMER IR/D AND PAILED TRANSISTORS REPLACED.	EPLACED.				·
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SENERAL DYNAHICS CONVAIR DIVISION

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	9981 207 BI	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBON	¥				[
	BUB-SVATEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIP	817E 71ME DIF	# 5 5 5	SITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	9	
	AUTOFILOT-ROUND-A/B PROSRAIMER	AES1-0274/FC-4CO-01-111 BWI TCH/ARN-BAFE	COMPOSETE-FACTORY	1110	FACTORY	ğ 9		<u>:</u>	
	FAILURE MODE-FAIL TO OF T, AND & MERE OUT OF BEG	. TO OPERATE AT PRESCRIBED TIME. THE FUBER IN THE NOSE COME SIMULATOR FAILED TO BLOM, CHAN OF SEQUENCE AND CHANNEL & FAILED TO INDICATE RECEIPT OF THE GUIDANCE RESET TIMER COMMAND.	IN THE NOSE CONE SI	HULATOR FA	1LED TO (700	FAILED TO BLOM, CHANNELS S.6. RESET TIMER COMMAND.		
	BYSTER EFFECT-OPERATION DOES NOT IN. FURTHER INVESTIGATION REVEALED	RATION DOES NOT START. IRREGULARITIES NERE ATTRIBUTED TO EL' GATION REVEALED THAT THE MOONS ARHING DEVICE MAS INSTALLED.	CE WAS INSTALLED.	ER ERROR O	A 7537 &	2	TO EITHER ERROR OR TEST ERUIPMENT MALFUNCTIO	2 .	
	VEHICLE EFFECT-COMPOSITY	WENICLE EFFECT-COMPOSITE RE-SCHEDULED-RERAN COMPOSITE.							
	CORRECTIVE ACTION-REPLACED ARMING DEVICE.	ICED ARMING DEVICE.						-1	
	AUTOFILOT-ROUND-A/B PROGRAHNER	AES1-0274/FC-4CO-01-111 TRANSISTOR	COMPOSITE-PACTORY	1110 610308	PACTORY	ž 8		:	
	FAILURE MODE-FAIL TO OF	TO CPERATE AT PRESCRIBED THE-THO DISCRETE STEPS IN THE PITCH PROGRAMMEN MERE NOT INDICATED.	IE STEPS IN THE PITC	H PROGRAM	20 1626	ž ž	MD1CATED.		
	SYSTEM EFFECT-INFROPER ANALOG START OF THE PITCH PROGRAMMER.	BYBTEN EFFECT-INPROPER ANALOG BIGNALS-THE PITCH RATE VOLTAGE PAILED TO CHANGE AT 45 BECONDS AND AT 59 BÉCONDS APTER BYBRT OF THE PITCH PROGRAMMER.	E FAILED TO CHANGE	AT 45 BECO	94 40	*	SECONDS AFT	5	
	WENTELE EFFECT-COMPOSITY	VEHICLE EFFECT-COMPOSITE RE-SCHEDULED-COMPOSITE RERAN AFTER REPAIRS TO PROGRAMMER MENE MADE.	REPAIRS TO PROGRAM		ADE.			. ~ ~ ~ ~	
	CORRECTIVE ACTION-TAD	CORRECTIVE ACTION-TWO TRANSISTORS IN PROGRAMMER LOGIC CIRCUITRY WERE REPLACED.	JITRY WERE REPLACED.					-	
	AUTOFILOT-GOUND-A/B PROGRAMEDR	68-04-216 841TCH	FAR 7-41011-977	950 610420	4	768 65 65	y 04	:	
	FAILURE MODE-FAILED TO A MO-GO SIGNAL INDICATI	FAILURE MODE-FAILED TO OPERATE AT PRESCRIBED TIME. THE APCHE CARD MEASURING CLOSURE TIME OF BNITCHES IS AND 41 GAME A NO-GO SIGNAL INDICATING FAULTY BNITCHES. FAILURE COULD NOT BE TRACED TO ANY COMPONENT.	NE CAND MEASURING CL	COMPONENT.	O 8M1	***	75 FF FF FF	*	
	CORRECTIVE ACTION-NOME-	CORRECTIVE ACTION-NOME-FAILURE COULD NOT BE CONTIRHED.		i	•				
1	AUTOFILOT-ROUND-A/B PROGRAMMER	68-04-185 847 TCM	FAR 7-41011-005	#5D #10408	E S	ភូទ		-	201710
	PAILURE MODE-PREMATURE ILURE MAS DUE TO SMITCH	FAILURE MODE-PREMATURE OPERATION. DURING A COUNTDOMN LOOP TEST GUIDANCE WAS EMABLED PRIOR TO THE SPECIFIED TIME. FA LURE WAS DUE TO SHITCH SS BEING IMPROPERLY GAGED AT RESET.	IEST GUIDANCE WAS EN	Mateo PRIO	a to the	2	1F1ED 71ME.		
	CORRECTIVE ACTION-6D/C TO AUGHENT EXIS GAGING OF PROGRAMMER BUITCHES AT RESET.	CORRECTIVE ACTION-6D/C TO AUGHENT EXISTING PROCEDURES TO PAY SPECIAL ATTENTION TO THE GASING AND INSPECTION OF THE ASIMG OF THE ASIMG OF A RESET.	IY SPECIAL ATTENTION	10 THE 64	61NG AND	1 K	FCT10N OF 1N		
							PAGE COLE		

	24 JUN 1366	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	WILOT SYSTEM-AIRBOR	¥		I		بے
	8787EH 818-8737EH	TESTAEPONT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	3116 11HE 01F	# 5 E 5	VEHICLE SITE PRI VENDOR MANE DATE DIP TIME DIP OTH VENDOR PART NO	*
	AUTOFILOT-ROUND-A/B PROGRAINGR	DA418-82-4MO-01-98 8417CM	COMPOS I TE-PRO/DPL	950 6103£1	8768-R	÷ è		5, 27, 76
	PAILURE MODE-SHORT SELEC	SCIECT). PROGRAMMEN SWITCH SO SHORTES.						
	SYSTEM EFFECT-OFERATION ONDS.	SYSTEM EFFECT-OPERATION STARTS TOO EARLY. THE PLIGHT CONTROL SYSTEM RESPONDED TO GUIDANCE STEERING PRICK TO SOD SEC MDS.	A. SYSTEM RESPONDED	TO GUIDANC	C STECRI	£	108 TO 100 MC	Water <u>an a</u> t the strong
	WONICLE EFFECT-NOME.							
	CORRECTIVE ACTION-PROGRAMMER REPLACED.	MHER REPLACED.						·
	AUTO-11.07-ROMD-A/B PROGRAMER	GR-04-181 SMIYCH	7-41011-805	*50 *10320	¥ 5	ž 3		• • • • • • • • • • • • • • • • • • •
	FAILUME MODE-FAILED TO CORAMER. BELIEVED TO BE	FAILURE HODE-FAILED TO OPERATE AT PRESCRIBED TIME. DURING AN APCHE RUN THERE WAS NO OUTPUT FROM BUITCH 40 OF THE PR Xaringer, believed to be caused by test equipment.	IN APCHE RUN THERE M	AB NO OUT	17 PROM	of fine	1 40 Qf 186 FF	
	CORRECTIVE ACTION-NOWE.	FAILURE NOT CONTINED.						
	AUTOFILOT-ROMD-A/B	68-04-188 84/1704	FAR 7-41011-095	950	R F2	7 5 5		****
	WOSE-OUT OF TON 72 OPEN	F TOLERANCE. DURING AN APONE ONECK, UBING DECK 15, CARD 177 NAS NO-60, FAILURE COULD NOT BE RATED BATISFACTORILY DURING TESTING AT BAN DIEGO, BELIEVED TO BE CAUSED BY TEST EQUIPMENT.	F GECK 15, CARD 177 (IN DIEGO. BELIEVED T	MAS NO-60.	PATLURE D BY TEST	COLF.	D NOT BE CONT.	
	CORRECTIVE ACTION-NONE.	CAUSE OF PAILURE COULD NOT BE DETERMINED.	IMI MED.	***************************************				
	AUTOFILOT-ROMB-A/B PROCRAMER	AE61-0097/FC-4CO-01-110 TRANSISTOR	COMPOS I TE-FACTORY	1100	FACTORY	Y O		10000
	FAILURE MOE-FAIL DURING A DEFECTIVE TRANSISTOR W	FAILURE MOE-FAIL DURING OPERATION-AT TWO INTERVALS DURING THE TEST THE PITCH PROGRAM GUTPUT VOLTAGE WAS TOO NIEM. A DEFECTIVE TRANSISTOR WAS FOUND IN THE PITCH PROGRAM CIRCUITRY.	THE TEST THE PLICH	PROGRAM OX	ITPUT YOU	14 GE	MAS TOO HIEM.	
	BYSTEM EFFECT-OPERATION REGULATED VOLTAGE 18 1.0 P	BYSTEM EFFECT-OPERATION TOO HIGH. PITCH PROGRAM VOLTAGE MAR B.O. VOLTS AT 18 TO 30 SECONDS AND AT 75 TO 85 EBUIRED WOLTAGE IS 1.6 PLUS OR HIMUS D.E VOLTS.	A 2.0 VOLTS AT 15 TO	30 SECONE	S AND AT	<u>.</u>	O 85 SECONDS.	
	WENTCLE EFFECT-COMPOSITE D	WENICLE EFFECT-COMPOSITE DELAYED- ADDITIONAL SUBSYSTEM TESTING WAS REGUINED TO SHOW CORRECT OPERATION AFTER DEFECTI E transistor was replaced.	TING MAS RESULACD TO	BHOM CORE	IECT OPER	¥710	AFTER DEFECTI	
1	CORRECTIVE ACTION-REPLAC	CORRECTIVE ACTION-REPLACED DEFECTIVE TRANSIBTOR.						·
							BACK DOLD	
_							PACE CLASS	

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SYSTEM-AIRBORNE
REVIEW-AUTOFILOT
DIFFICULTIES

•	1,44	TESTABLES WAS TO	DIF DATA SOURCE	VEHICLE	31.16	Ē	VENDOR	F. M.	
	231474-604	FAILED COMPONENT NAME	PART NUMBER	DATE DIF TIME DIF	71ME 01F	E O	MENDON	OTH VENDOR PART NO	
	AUTOFILOT-ROMD-A/B	86-04-180 BMI 7CH	FAR 7-41011-877	900018	9478	ដូទ្ធ			:
	FAILURE MODE-FAILED TO C CUT-OFF, BELIEVED TO BE	ED TO CEASE CPERATION AT PRESCRIBED TIME, BURING APCHE TESTING DECK 37 INDICATED SMITCH 74 DID NOT TO BE TEST EQUIPMENT PROBLEMS.	DURING APCHE TESTI	46 DECK 37	INDICATE	8	1CH 74	DID NOT	·
	CORRECTIVE ACTION-NOME.	PAILURE HOT CONTINED.				1			
	AUTOFILOT-ROIND-A/B PROGRAHMER	AMPLIFIER TRANSPORMER	FAR 7-41011-977	\$60 \$10304	2	្នំ ទ <u>ិ</u>			84733
	FAILURE PODE-FAIL DURING Nº 8 DUE TO THE FAILURE OF	M OPERATION. DURING APCHE TESTS THERE WAS NO OUTPUT FROM THE PITCH SERVO-AMPLIFIER. FAILURE F THE INTEGRATOR TRAMBOUCER EXCITATION TRANSFORMER T-404.	RE WAS NO CUTPUT FRE	24 74 F17	- 9KER 45	į	7.EB. 7	ATLURE	c
	CORRECTIVE ACTION-BINCE NTENSIFY SURVEILLANCE OF	CORRECTIVE ACTION-BINCE THIS IS FIRST REPORTED FIELD FAILURE OF THIS TRANSFORMER AND CAUSE IS NOT KNOWN 60/C WILL I	RE OF THIS TRANSPORT	ER AND CA	387 38 MG	T KING	9	אנר ז	
	AUTOFILOT-ROIND-A/B PROGRAMEEN	96-04-190	FAR 7-41011-877	61D 61030e	Ø. 78	2 0		,	***
	FAILURE MODE-OUT OF TOLERANCE. PITCH PROGRAM. BELIEVED TO BE	OF TOLERANCE. DURING APCHE TESTING SEVERAL NO-GOS NERE RECEIVED DURING A PORTION OF THE PROGRAMMEN LIEVED TO BE TEST ESUIPMENT.	L NO-608 WERE RECEI	ACD DURING	A FORTIO	8 8	THE PRO	GRAVOER	1.
	CORRECTIVE ACTION-NOME, PAILURE NOT CONFIRMED.	PAILURE NOT CONTINED.							1
	AUTOFILOF-ROAG-A/B PROGRAMEZE	96-04-179	PAR 7-41011-077	730 610226	2	₽ ₽	2/9		24.730
1	FAILURE MODE-FAIL DURIM IMPROPER RESET, FAILURE	DURING OPERATION.SF DU-ING AN APCHE RUN A NO-GO INDICATION WAS RECEIVED ON CARD 45, INDICATING AN AILURE WAS LATER TRACED TO APCHE.	A NO-60 INDICATION	MAS RECEIVE	50 OH CAN	5 5	11010	¥114	-
	CORRECTIVE ACTION-APCHE	CORRECTIVE ACTION-APCHE PROBLEM WAS REPOLVED AT WARREN.							
							2	FASE DOSS	

GENERAL DYNAMICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

PRI VENDOR MANE	NO 60/C 888433	13 EXPECTED. 17 W	T& MICH.	BUT MAS BEING ATTENUATE MISSILE RATHER THAN AT	7E3 894391	BEI TENED CAUSED B	EEN THE FACTORY AN	EEN THE FACTORY AN	· · · · · · · · · · · · · · · · · · ·			
VEHICLE BITE DATE DATE DATE DATE DIP	1000 FACTORY 610228	PLUS OR HIMUS O.E VOLTS IS EXPECTED. 17 EQUIPMENT.	E OF PLICHT WOULD BE TO	ILOT STREM. NY AT THE MISSILE BUT WA 46 CIRCUIT AT THE MISSIL	390 OA/16 1		CRIED DURING THE TEST. THE COMPATIBILITY BETM	THE COMPATIBILITY BETHE	THE COMPATIBILITY BETHE 11C BYCANORE ! 610202 NOT CUT OFF AT THE PRE DVERTENTLY OVERLOADED !	THE COMPATIBILITY BETHE THE COMPATIBILITY BETHE THE COMPATIBILITY BETHE THE STANDARD BETHE THE STANDARD BETHE TON. ###################################	INE NO-GO CARDS NERE REPORTED DURING THE TEST. BELIEVED CAUSED BING. FAR 11C SYCANGRE NO E7-41001-839 11C SYCANGRE NO E7-41001-839 11C SYCANGRE NO E7-41001-839 10202 NO D TO TEST THE SCO FUNCTION. PAR 610202 OAFS YES REARFOTT T-04250-1 NO TO TEST THE SCO FUNCTION. PRODUCT SUPPORT CENTER THE 6YRO HEATER CONTROL CIRCUIT EXHISTER TO A PHASE TO PHASE SHORT CINCUIT IN THE SPIN NOTOR STATOR WIND	THE COMPATIBILITY BETHE 11C SYCANORE P 410EOE AT THE PRE DVERTENTLY OVERLOADED P 10N. 410EOE CAFB P THE GYRO HEATER CONTROL RT CIRCUIT IN THE BFIN
DIF DATA SOURCE PART NUMBER	COMPOSITE-FACTORY	IN MAS 4.6 VOLTS. 5.0 F	E TOO LOW- PITCH PHASE	REGUINED OF THE AUTOFF CUTPUT MAS SATISFACTOR THE COMPLETE MONITORIA	FAR 7-41015-919		E NO-GO CARDS MEME NEP No. ED ACTION TO INCREASE	E NO-GO CARDS NEME REP No. ED ACTION TO INCREASE PAR PAR PAR 27-41001-839	E NO-GO CARDS MERE REP ED ACTION TO INCREASE PAR PAR PAR PAR PAR PAR PAR PAR	EN ACTION TO INCREASE ED ACTION TO INCREASE FAR ET-41001-838 E SUSTAINER ENGINE WAS RIS DIODE THAT WAS INMIT TO TEST THE SCO PUNCT! FAR 7-04250-1	E NO-GO CARDS MERE REP. ED ACTION TO INCREASE PAR E SUSTAINER ENGINE MAS RILL DIODE THAT WAS INAI TO TEST THE SCO FUNCT PAR PAR PAR PAR PAR PAR PAR PA	E NO-GO CARDS MERE REPE. ED ACTION TO INCREASE PAR E SUSTAINER ENGINE MAS RILL DIODE THAT WAS INAI TO TEST THE SCO FUNCT FAR PARETO PUNCT RODUCT SUPPORT CENTER O A PHASE TO PHASE SHO
TEST/REPORT NUMBER FAILED COMPONENT NAME	AE81-0031/FC-4CO-01-100	FAILUME MODE-OUT OF TOLERANCE, BUSTAINER PITCH PROGRAM MAS 4.6 VOLTS, 5.0 PLUS OR HI AS DETERMINED THAT A D.R. VOLT DROP EXISTED BETNEEN VEHICLE AND GROUND TEST EQUIPMENT.	SYSTEM EFFECT-OPERATION TOO LOM- PITCH PROGRAM VOLTAGE TOO LOM- PITCH PHASE OF FLIGHT WOULD BE	WENICLE EFFECT-COMPOSITE DELAYED. ADDITIONAL TESTING REQUIRED OF THE AUTOFILOT STREM. CORRECTIVE ACTION-INVESTIGATION SHOWED PITCH PROGRAM CUTPUT MAS SATISFACTORY AT THE MISSILE BUT WAS BEING ATTENUATI D IN THE MONITORING CIRCUIT. CORRECTED BY CALIBRATING THE COMPLETE MONITORING CIRCUIT AT THE MISSILE RATHER THAN AT THE RECORDING GALVANOMETER.	\$6-04-194		FAILURE MODE-OUT OF TOLERANCE, DURING CAPCHE TEST FIVE NO-60 CARDS MERE REPORTED DURING THE TEST, BELIEVED CAUSED B INCOMPATIBILITY BETWEEN THE FACTORY AND FIELD TESTING. CORRECTIVE ACTION-FAILURE NOT CONFIRMED, 6D/C INITIATED ACTION TO INCREASE THE COMPATIBILITY BETWEEN THE FACTORY AN	TANCE, DURING CANCHE TEST FIT I THE FACTORY AND FIELD TESTIN IE NOT CONFIRMED, 60/C INITIAT BB-D4-140 DICDE	FAILURE MODE-OUT OF TOLERANCE, DURING CAPCHE TEST FIVE NO-GO CARDS MERE REPORTED DURING THE TEST, BELIEVED CAUSED BY INCOMPATIBILITY BETWEEN THE PACTORY AND CORRECTIVE ACTION-FAILURE NOT CONFIRMED, ED/C INITIATED ACTION TO INCREASE THE COMPATIBILITY BETWEEN THE PACTORY AND FIELD TESTING. TOPILOT-ROUND-A/B BS-D4-160 PAR TO PAR PART PART MAS INDIVERTENTLY OVERLOADED PREVIOUSLY. CORRECTIVE ACTION-THE COMPONENT TEST BET WAS MODIFIED TO TEST THE SCO FUNCTION.	THE FACTORY AND FIELD TESTING IN THE FACTORY AND FIELD TESTING IE NOT CONFIRMED. 6D/C INITIAT BB-D4-149 DICDE MOMENT TEST BET WAS HODIFIED JA-D4-187 DISPLACEMENT GYRO HOTOR	OF TOLERANCE. DURING CAPCHE TEST FIVE NO-GO CARDS NERE REPORTED DURING THE TEST. BELIEVED CAUSED B BETNEEN THE FACTORY AND FIELD TESTING. **ALLUNE NOT CONFIDED. 6D/C INITIATED ACTION TO INCREASE THE COMPATIBILITY BETNEEN THE FACTORY AND DICKE **BB-DA-169** *	E NOT CONTINE CANCHE TEST FINITATE PACTORY AND PIELD TESTINE BB-D4-189 BB-D4-189 BIGDE OFH. DURING A TEST FIRING TH FAILURE WAS DUE TO AN OPEN C JA-D4-197 BISPLACEMENT SYRO NOTOR SHORT. DURING A TEST AT THE P FAILURE INDICATION WAS DUE T
8787EN 848-8787EN	AUTOPILOT-ROING-A/B	FAILURE HODE-OUT OF TOLI	SYSTEM EFFECT-OPERATION	WDICLE EFFECT-COMPOBITE D CORRECTIVE ACTION-INVESTIG D IN THE HOMITORING CIRCUIT THE RECORDING GALWANNETER,	AUTOPILOT-ROLAD-A/B PROGRAMMER		FAILURE MODE-OUT OF TOLE V INCOMPATIBILITY BETWEED CORRECTIVE ACTION-FAILUR D FIELD TESTING.				FAILURE MODE-OUT OF TOLL Y INCOMPATIBILITY BETWEEN CORRECTIVE ACTION-FAILUR D FIELD TESTING. AUTOFILOT-ROUND-A/B PROGRAMMER SCO SIGMAL, HE PROGRAMMER SCO SIGMAL, HE PROGRAMMER SCO SIGMAL, FAILURE MODE-ELECTRICAL HE PROGRAMMER SCO SIGMAL, HE PROGRAMMER MODE-ELECTRICAL FAILURE MODE-ELECTRICAL D INTERNITIENT OPERATION, 100, CAUSING OVERHERSISS.	2 14 U 2 14 5 5 5 7

SEMENAL DYNAMICS CONVAIR DIVISION

1001 157 11	DIFFICULTIES REVIEW-AUTOFILOT STRM-AIRBORNE	OFILOT SYSTEM-AIRBOR	¥		
8787EH 816-8787EH	TEST/REPORT NUMBER FAILED CCAPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE BITE DATE DATE DIF	PRI VENDOR	MANE ART NO
AUTOPILOT-ROUND-A/B PROGRAMMER	64-04-187 SVI 7CH	FAR 7-41011-995	GLOSET WTR	22	
FAILURE MODE-ELECTRICAL CAUSED BY IMADVERTENT GR	FAILUME MODE-ELECTRICAL SHORT, BURING CAPCHE TEST SMITCHES S; 18: 18: AND 74 DID NOT OPERATE PI CAUSED BY INADVERTENT GROUNDING OF THE SMITCHES DURING TROUBLE SHOOTING PROCEDURES AT THE BASE.	5, 16, 18, AND 74 D BLE 8+3011MG PROCEDI	ID NOT OPERATE PARES AT THE BASE.	OPERATE PROPERLY. FAILURE MAS THE BASE.	i
CORRECTIVE ACTION-FIELD ES IN THE FIELD.	CORRECTIVE ACTION-FIELD PERSONNEL ALERTED TO CRBERVE ADEQUATE PRECAUTIONS WHEN CONDUCTING TROUBLE SHOOVING ACTIVITY IS IN THE FIELD.	ATE PRECAUTIONS WHEN	CONDUCTING TROU	BUE SHOOTING ACT	11111
AUTOP1LOT-ROUND-A/B PROGRAINEER	98-04-045 AMPLIFIEIR	FAR 7-41011-877		YE& 60/C	***************************************
FAILURE HODE-FAIL TO OF EMHBITED NO OUTPUT VOLT	TO OPERATE AT PRESCRIBED TING-DURING AN EMGINERRING EVALUATION TEST THE VAN INTEGRATOR ANPLIFIER VOLTAGE, FAILIRE COLLD NOT BE CONFIRMED.	eminering Cyaluati	ON TEST THE YAM	INTEGRATOR AMPLE	5
CORRECTIVE ACTION-NOM.	CORRECTIVE ACTION-MOME-CAUSE WAS UNDETERMINED.	-			
AUTOFILOT-ROAND-A/B PROGRAMMER	98-04-116 947 TOH	FAR P-41111-077	801215 OAFB	7£3 6	11966
FAILURE MODE-FAILED TO	FAILURE MODE-FAILED TO OPERATE AT PREBCRIBED THE. DURING APCHE CHECKOUT BATTCH S6 INDICATED IT WAS STICKING.	APCHE CHECKOUT BATTO	H 86 INDICATED I	T MAS STICKING.	
CORRECTIVE ACTION-NOWE.	. PAILURE NOT CONTINED.				
AUTOFILOT-ROUND-A/B PROGRAMMER	A9-04-139 POTENTIONETER	PAR	1010 FACTORY 601204	763 660. NO 0.	RATTRAY C 694134
FAILURE MODE-ERRATIC OF E OFERATION, CAUSE WAS A	FAILURE MODE-ERRATIC OPERATION-DURING CHECROUT THE PROGRAMMER PITCH PROGRAM WAS ERRATIC AT 20 TO 30 BEC OF REAL TIM : OPERATION, CAUSE MAS A FAULTY POTENTIONETER THAT HAD EXCESSIVE END PLAY.	HER PITCH PROGRAM WESSIVE END PLAY.	A ERRATIC AT 20	TO SO SEC OF REA	
CORRECTIVE ACTION- WCAR	TO VENDOR TO TIGHTEN BUALITY CONTROL AND INSPECTION PROCEDURES.	L AND INSPECTION PRO	CEDURES.		
AUTOPILOT-ROUND-A/B PROGRAMMER	181-00-43	7.41011-998	99D WTR	5/09 09 09	
FAILUME MODE-OUT OF TOU ME BUBTAINER DEACTIVATIO	PAILUME MODE-OUT OF TOLEMANCE-DURING APCHE CHECK A NO-60 WAS RECRIVED. INTEGRATOR LOCKOUT VOLTASE WAS LOM, INDICATI NS BUSTAINER DEACTIVATION DURATION TIME HAS TOO LONG. PAILURE ATTAIBUTED TO APCHE TOLERANCE STRUCTURE. APCHE WAS CHE	AB RECRIVED. INTEGRA	ITOR LOCKOUT VOLT	ASE NAS LOM, 1MC UCTURE, APCHE NA	11 CAT1
		-		PAG	PASE DOIS

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORME

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	MILETE MILETE - SUS	TESTARFORT NUMBER FAILED COMPONENT MANE	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	11 PE 01F	PRI VENDOR PART NO	
<u> </u>	CAING AT THE ENGINE INSTEAD OF	E INSTEAD OF AT THE PROGRAMMER REGUIRING AN ADDITIONAL 10 MILLI SECOND TIME LAG. APCHE UPPER LIMIT TOLERANCE RAISED TO 200 MILLI-EECONDS TO ALLOW FOR SYSTEM LAG. LOWER LIMIT TOLE	N ADDITIONAL 10 MILLI-EECONDS TO A	TOK LOW	TIME LAG.	LOWER LIMIT YOUR	*
	AUTOFILOT-ROUND-A/B 98-04-143 PROGRAMMER SWITCH	98-04-143	FAR 7-41011-423	601201	F 13	YES	101133
	FAILURE HODE-OUT OF TOLE -646ED DURIMG CALIBRATION	of tolerance. During Laboratory check programmer would not reset to zero. Smitch 351f had been his Bration at 40/c.	RAIMER MOULD NOT RE	ET TO ZER	O. SWITCH	SSIF HAD BEEN HIS	
	CORRECTIVE ACTION-UNKNOWN.	i			and dispersion and the second		
<u> </u>	AUTOFILOT-ROAD-A/B	AE40-1004/FC-4CO-0E-101	COSPOSITE-FACTORY	1010	FACTORY Y	7ES 60/C NO	13761
	FAILURE MODE-FAIL DURING	DURING OPERATION-MAKEROUS DROPOUTS MERE DISPLAYED DURING THE PITCH PROGRAHMER CYCLING.	ISPLAYED DURING THE	PITCH PRO	GRAMMER CY	CLIME.	
	SYSTEM EFFECT-ERRATIC OFFRATION.	FRATION.			,		
	VEHICLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE DELAYED-POST COMPOSITE TESTIMS OF THE AUTOPILOT SYSTEM REQUIRED	THE AUTOPILOT SYSTEM	A REQUIRED			
	CORRECTIVE ACTION-PITCH	PROGRAMMER MAS REPLACED					
<u> </u>	AUTOFILOT-ROUND-A/B PROGRAMMER	AE6G-0868/FC-4CO-01-097	COMPOSETE-FACTORY	970 601105	FACTORY NO	0.0	88888
	FAILURE MODE-FAIL TO OPE LIAMEGUSLY BECAUSE RELAY	TO OPERATE AT PRESCRIBED TIME - THE WCO AND UNCAGE SATELLITE RELAY KSE IN THE PROPULATION SYSTEM ENGINE RELAY BOK HAD NOT		FYRO DISCR	ETE FUNCTI	67RO DISCRETE FUNCTIONS OCCURRED SIMU BEEN EMERGIZED. (PROCEDURE ERROR).	
	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS	DISCRETE SIGNALS					
	VEHICLE EFFECT-COUNTDOM	WENICLE EFFECT-COUNTDOM OR COMPOSITE DELAYED OR RESCHEDULED-PARTIAL COMPOSITE RETEST PERFORMED.	D-PARTIAL COMPOSITE	RETEST PE	RFORMED.		
	CORRECTIVE ACTION-COMPON	CORRECTIVE ACTION-COMPOSITE TEST PROCEDURE 27-92004-1 MAS REVISED	EVISED (REVISION AV).				
	AUTOPILOT-ROUND-A/S PROGRAMMER	AEGO-DTSG/FC-SCO-D1-D09 CIRCUIT BOARD	COMPOSITE-PACTORY	PE 901011	F 2	7£8 100	
1	FAILURE MODE-FAIL TO CPE	TO CPERATE AT PRESCRIBED TIME- VERNIER CUTOFF ACTIVATION DID NOT OCCUR.	TOPF ACTIVATION DID	NOT OCCUR			
-							

GENERAL DYNAMICS CONVAIR DIVISION

	3841 HOF 81	DISFICULTIES PEVIEW-AUTOPILOT SYSTEM-AIRBORME	OPILOT SYSTEM-AIRBOR	¥			Γ
L	73/4/4 20/4/4-624	TEST/REPGRT NUMBER FAILED COMPONENT HAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME BIF		PRI VENDOR NAME OTH VENDOR PART NO	9
1	VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHÉDULED-COMPOSITE RE-RAN.					•
	CORRECTIVE ACTION-PROGRA	CORRECTIVE ACTION-PROGRAMMER REMOVED AND LOGIC BOARD 3 REPLACED.	LACED.				1
11	AUTOFILOT-ROLEG-A/B	AEGO-0730/FC-8CO-01-008 CIRCUIT MUARD	COMPOSITT-FACTORY	9E 601011		YES HO	***************************************
	FAILURE MODE-FAIL TO OPE DS AFTER ACTIVATION FOR A	FAILURE MODE-FAIL 10 OPERATE AT PRESCRIBED TIME-THE JETTIBON BOOMTER PACKAGE BUITCH WAS OBBERVED TO OPEN 1-45 BECON DS AFIER ACTIVATION FOR A DURATION OF 0-55 SECONDS.	ON BOOKTER PACKAGE BI	ATTON MAS O	BACAVED	O OPEN 1.45 BEC	
	STATEM EFFECT-OFERATION	STSTEM EFFECT-OFERATION STARTS TOO LATE-SMITCH OPENS 1.45 SECONDS AFTER ACTIVATION.	SECONDS AFTER ACTIVA	1104.			
	WEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE RE-RAM.					
	CORRECTIVE ACTION-PROGRA	CORRECTIVE ACTION-PROSRAMMER WAS REMOVED AND LOGIC BOARD NO.	O. S MEPLACED.				_
1 2 2	AUTOFILOT-ROMD-A/B PROGRAMMER	AE80-0781/FC-4CO-01-092	COMPOST TE-FACTORY	\$20 \$00914	FACTORY	753 60/C 7E3	•
	FAILURE MOE-OUT OF TOLE MG. THESE SMITCHES WERE N	OF TOLERANCE. SUSTAINER AND VERNIER ACTUATOR SMITCHES MERE OUT OF TOLERANCE DURING COMPOSITE TESTI. . WERE NEAR THE LIMITS AT COMPONENT LEVEL.	ION SWITCHES WERE OU	T OF TULERA	HCE DUATE	6 COMPOSITE TES	
	SYSTEM EFITCE-OPERATION	ERATION TOO LONG.					
	VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED. SYSTEMS LEVEL AND COMPOSITE TESTING REQUIRED.	HPOSITE TESTING REGU	IRED.		• •	
	CORRECTIVE ACTION-FLIGHT STATEM LEVEL TESTING SMIT E REFINEMENT.	CORRECTIVE ACTION-FLIGHT PROGRAMMER WAS RENOYED FOR READJUSTHENT OF SUSTAINER AND VERNIER ACTUATOR SWITCHES. FISTEM LEVEL TESTIME SMITCH TIMING IS BASED PARTIALLY ON EMGINE PEEDBACK TRACE, TOLERANCES WERE REVIEWED FOR PEFINEMINT.	SUSTAINER	AND VERNIER TOLERANCES	ACTUATOR VERE REV	AND VERNIER ACTUATOR SWITCHESS. SIME. TOLERANCES WERE REVIEWED FOR POSSIBLE	
L₹	AUTC#1LOT-ROUND-A/B	90-04-123	7.48		ET# 1	763	
	PROGRAMMER	RELAT	1-41011-47	600831	•	,	,
·	FAILURE MODE-FAILED TO OPERATE AT PRESCRIBEI IBITED INTERNITIENT MAGN CONTACT RESISTANCE.	DPERATE AT PRESCRIBED TIME, PROGRAMMER REJECTED FOR PAILING TO RESET TO ZERO. AELAY MSTA EXM Contact resistance.	NER REJECTED FOR PAI	LING TO RES	£7 TO ZEI	O. AELAY N374 E	<u> </u>
	CORRECTIVE ACTION-(1) 60/C CULLED OUT D SURVEYED AND DEFECTIVE RELAYS REPLACED.	OUT DEFECTIVE STOCK (2). ACED.	A SECOND SOURCE VENDOR WAS SELECTED.	OR NAS SELE	ł	(3) PRODUCTION ITEMS	2
1 3 2	AUTINFLOT-RCIND-A/B	AE40 - D555/PE-402-00-3E	COUNTDOM	320 600#03	-3000	YES 60/C	
	PAILUNG MODE-PAIL TO OPE	TO OPERATE AT PRESCRIBED TIME. "HE AUTOPILO? PROGRAHHER WAS NOT STARTED ON TIME FOR THE LOOP TEST	ILOT PROGRAMER MAD	HOT STARTED	\$ 7	FOR THE LOOP 7E	-
	мадагон фице мунет денерател сейтерен сейтерен фице		de periode in the per		in public products of the format of the	PAGE DOIS	•

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STSTEX SUB-STSTEX	TEST/REPORT NUMBER	DIF DATA SOURCE FART NUMBER	VEHICLE DATZ DIF	\$17E	PRI VENDOR NAME OTH VENDOR PROT NO	OR NAME PROT NO	
SYSTEM EFFECT-IMPROPER C	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS DUE TO LAIR START OF PROGRAMMER.	AT OF PROGRAMMER.					•
VEHICLE EFFECT-COUNTDOM	VEHICLE EFFECT-COMIDOM DELATED TO RERUN 1.00F TEST, NO HOLD CALLED.	HOLD CALLED.					
CORRECTIVE ACTION-LOOP	CORRECTIVE ACTION-TEAT RERUN. PROGRAMMEN STARTED ON TIME.	4 TIME.			-		
AUTOFILOT-ROMD-A/B	\$6-04-09E	FAR 7-41011-977	320 600729	ETA	YES 60/C NO		*****
FAILURE PROE-CONTANINATI ANMER SCRAPPED.	ANINATION, PROGRAMMER REMOVED AND TESTED FOR MERCURY CONTANINATION. CONTANINATION CONFIRMED. PROGR	ED FOR HERCURY CONTAME	#1104. COM	TAKINATIO	и сометии	ED. PROGR	
CORRECTIVE ACTION-ALL FA ALL CANISTERS IN STOCK A 2647 STATUS.	CORRECTIVE ACTION-ALL FACTURY EQUIPMENT CHEFIED FCR MERCURY CONTANIMATION. MERCURY MANNOMETERS REPLACED MITH 646ES. ALL CANISTERS IN STOCK AND ON MISSILES OMECKED FOR CONTANIMATION. CANISTERS FOUND CONTAMINATED MERE REMOVED FROM FL 647 STATUS.	CURY CONTAMINATION. ME.	RCURY MANNO DUND CONTAN	ETERS REINATED NE	REPLACED WITH GAGES. MERE REMOVED PROM FL	TH GAGES.	
AUTOFILOT-ROUND-A/B	98-04-069	FAR 7-4-077	320	ETR	YES 60/C		997900
FAILURE MODE-FAIL DURING AND BOOSTER CUTOFF, FAILURE ATTOM-MOME-	FAILUNE MODE-FAIL DURING OFERATION-DURING SYSTEM FREGUENCY RESPONSE TESTS THE PROGRAMMER STOPPED BETWEEN ZENO TIME NO BCOSTER CUTOFF. FAILURE ANALYSIS AT SO COMD NOT COMPIRM FAILURE.	NCY RESPONSE 1ESTS THE FIRM FALLURE. NOT BE DETERMINED.	PROGRAMMER	STOPPED	BETWEEN Z	540 T I #	
	A CARACTER AND		********	Vac Trans	VE 60./C		804610
AUTOFILUT-ROUND-A/B PROGRAMMER	60-64-117	7-41011-677					
FAILURE WOE-OUT OF SPEC	SPECIFICATION: MOTED DURING CAPCHE CHECKCUT, FAILURE MOT CONFISHED BY FAILURE ANALYSIS:	CHECKOUT, FAILURE HOT	CONFIRMED B	Y FAILURE	AMALY 913		
CORRECTIVE ACTION-NOME.							
AUTOPILUT-ROUND-A/B PROGRAHECR	98-54-592 AWLIFIER-WCHANICAL	FAR 7-41011-977	550 663706	FACTORY	YES 60/C		
FAILURE MODE-OUT OF YOLL LINTE ROLL INTO	PAILUNE MODE-OUT OF TOLERANCE-DURING EMGINEERING EVALUATION TEST THE ROLL INTEGRATOR GAINS MERE BSLOW SPECIFICATION LINITS AND THE ROLL INTEGRATOR STOPS MERE TOO HIGH. ROLL INIEGRATOR GAIN DISCREPANCIES WERE NOT CONFIRMED.	TICH TEST THE ROLL INT L INTEGRATCR GAIN DISC	EGRATOR GAI REPANCIES W	HS MERE B	CLOW SPEC	1F1 CA 71 OM	
			e ten suddensstränge virillöver studen			PAGE DO19	

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15 JUN 1886	DIFFICULTIES REVIEW-AUTOPILOT : YBTEM-AIRBORME	PILOT : YBTEN-AIRBOR!	į.			_
STRICE SUB-STRIEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART HUNDER	VEHICLE B	BITE PRI	VEHICLE BITE PRI VENDOR PART NO DATE DIF THE DIF OTH VENDOR PART NO	
CCARECTIVE ACTION-COURSE ADJUS	1-COURSE ADJUSTMENT PROCEDURES AND ELECTRO-NECHANICAL INTEGRATOR STOP SETTING PROCEDURES MERE REVISITURE PROPLEMS.	HECHANICAL INTEGRATO	A STOP SETT!	ME PROCEDI	MES LERE REVIS	******
AUTOFILGT-ROMB-A/B PROGRAMER	BD-04-099 AMPLIFIER-MECHANICAL INTEGRATOR	FAR 7-41011-977	800621 WTR	22		*****
FAILURE MODE-OUT OF TOLER	OF TOLERANCE-DURING CAPCHE CHECK A MO-GO MAS INDICATED FOR THE ROLL INTEGRATOR PLUS PHASE A SHIFT. BE TRACED TO AUTOPILOT GROUP.	AS INDICATED FOR THE	ROLL INTEGR	ATOR PLUS	PHASE A SHIFT.	
CORRECTIVE ACTION-RECOME.	HECCOMMENDED TO OPERATIONS THAT ALL CAPCHE INDICATED FAILED UNITS BE RETESTED ON PROGRAMMER CHECKO. CITION UNTIL CAPCHE VALIDATION AND SELLOPF IS COMPLETED.	INDICATED FAILED UP	IITS BE RETES	TED ON PAK	-	
AUTOFILOT-ROUND-A/B PROGRAHHER	AA60-0048/PE-ACO-01-E? PROGRAMER WINIMG	COMPOSITE-& FACT	270 12 400616	Y E		984012
FAILURE MOE-FAIL TO OPER	FAILURE MOES-FAIL TO OPERATE AT PRESCRIBED TIME, DURING FACT TEST, THE NOISE COME, BOOGTER BEPARATION, PVT, AND FIR E RETROPOCKETS SIGNALS WERE NOT GENERATED. PROBLEM DAE TO INTERNITTENT PROGRAMMER ARM-BAFE CIRCUITAT.	I TEST, THE MOISE CO	ME, BOOSTER	BEPARATION	I, PVT, AND FIR	
SYSTEM EFFECT-OPERATION DOES NOT START.	OES NOT START.					
WEMICLE EFFECT-COMPOSITE RESCHEDULED.	RESCHEDUED.					
CORRECTIVE ACTION-PROGRAM	CORRECTIVE ACTION-PROGRAMMER REPLACED. ICCRRECTIVE ACTICS, ON PROGRAMMER UNKNOWNS.	A PROGRAMMER UNKNOW	1).			
AUTOFILOT-ROUND-A/B PROGRAMMER	0A209/83-4H7-01-53 COMMECTOR	COMPOSTIE-FRD/DPL	530 8-3 600613	YES NO		867238
FAILURE MOE-FAIL TO OPER	TO OPERATE AT PRESCRIBED TIME, CONNECTOR INSTALLED IN MRONG RECEPTACLE.	INSTALLED IN WRONG !	ECEPTACLE.			,
SYSTEM EFFECT-OPERATION D	SYSTEM EFFECT-OPERATION DOES NOT START. PROGRAMMER FAILED TO RESET.	O RESET.				
VEHICLE EFFECT-COMPOSITE ABORTED AND RESCHEDULED.	ABORTED AND RESCHEDULID.					
CORRECTIVE ACTION-COHNECT	CORRECTIVE ACTION-COMMECTOR REINSTALLED IN THE CORRECT RECEPTACLE.	PTACLE.			a de la composition	
AUTOFILOT-ROUND-A/B PROGRAMMER	0a209/81-4MO-02-53 Programmer	COMPOST TE-FND/DPL	550 574 400613	3748-3 YES	5/ 0 5	
FAILURE MOE-ERRATIC CPERATION. BAD PROGRAMMEN.	ATION. BAD PROCRAMEN.					
SYSTEM EFFECT-SWAGGER DE	STRIEM EFFECT-INFRCPER DISCRETE DIFCRETE SIGNALS. NO-60 LOOP TEST.	. 1681.				
WENTCLE EFFECT-COMPOSITE DELATED	DELAYLD.					

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	BYRTEN BUB-RYSTEN	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 71ME DIF	VEHICLE SITE PHE VENDOR NAMEDATE DIF TIME DIF OTH VENDOR PART NO	
	CORRECTIVE ACTION-REPLACED PROGRAMHER	ED PROGRAMMER.					497217
	AUTOFILOT-ROUND-A/B PROGRAINER	98-04-094 8417CH	FAR 7-41011-995	*1 *009	ETR	YES	0.7.0
	FAILURE HODE-FAIL TO OPE IFICRS, OR FROM THE B1 YA ITTENTLY.	FAILURE HODE-FAIL TO OPERATE AT PRESCRIBED TIME, DURING CHECK OUT THERE WAS NO OUTPUT FROM THE B1 AND B2 PITCH ANPL IFIERS, CR FROM THE B1 YAW MINUS ROLL AND THE B2 PLUS ROLL SERVOAMPLIFIERS, SMITCHES 43 AND 45 MERE OPERATING INTERM ITTENTLY.	CK OUT THERE WAS NO	CHES 43 A	24 THE 81 TO 45 WER	AND BE PITCH ANPL E OPERATING INTERM	
	CORRECTIVE ACTION-ALL PR	CORRECTIVE ACTION-ALL PROGRAMMERS TESTEN TO CULL OUT DEFECTIVE SWITCHES. FEW IMPROVED SWITCHES USED TO REPLACE DEFE CTIVE ONES. NEW PROGRAMMERS WILL USE ONLY IMPROVED SWITCHES.	IVE SWITCHES. IEW ID	PROVED SW	TTCHES US	ED TO REPLACE DEFE	
<u> </u>	AUTOFILOT-RIXMD-A/B PROGRAMMER	98-04-083 AMPLIFIER-9ERWO	FAR 7-41011-977	550 600608	ETR	YES 60/C	*634
	FAILURE HODE-OUT OF TOLE E SPECIFICATION LIMITS, F FOUND LOCAL IN THE SERVO	FAILURE MODE-OUT OF TOLERANCE-DURING MISSILE CHECKOUT THE VI PITT. SPECIFICATION LIMITS, FIELD TESTS CONFIRMED FAILURE, BUT IT COU FOUND LOSSE: IN THE SERVO AMPLIFIER SECTION ON THE CIRCUIT BOARD.	VI PITCH SERVO AMPLIFIER STATIC GAIM MAS 60 PER CENT ABOV IT COULD NOT BE DUPLICATED. SEVERAL SCRAFS OF SOLDER WERE BOARD.	TER STATI	C GAIN WA	S 60 PER CENT ABOV APS OF SOLDER WERE	
	CORRECTIVE CTIDM-QUALIT	-BUALITY CONTROL INSPECTION ALERTED TO ENSURE THAT PRINTED CIRCUIT DOARDS ARE CLEAN OF ALL LOOSE	URE THAT PRINTED CIF	ICULT BOAR	SS ARE CL	EAN OF ALL LOOSE \$	~
*· ·-·	AUTOPTLOT-ROUND-A/B	AE60-0386/FC-4CO-01-70	COMPOS I TE-FACTORY	700 600326	FACTORY	YES GO/C	88888
	FAILURE MODE-FAIL TO OPE F COMMAND, CLADITION WAS RIZATION SUITCH BEFORE TH	. TO OPERATE AT PRESCRIBED TINE-VERNIEA CUTOFF COMMAND OCCURRED SIMULTANEOUSLY WITH SUSTAINER CUTOF ON WAS CAUSED BY A PROCEDURE ERROR IN FAILING TO REQUIRE ACTIVATION OF THE PROPULSION TANKS PRESSU FORE THE SUSTAINER CUTOFF COMMAND.	OFF COMMAND OCCURRECTING TO REQUIRE ACTIV	SINULTAN	EOUSLY WI	TH SUSTAINER CUTOF LSION TAINS PRESSU	
	SYSTEM EFFECT-IMPROMER DISCRETE SIGNALS.	HECRETE BIGHALS.					
	VEHICLE EFFECT-COUNTDOM	VEHICLE EFFECT-COUNTDOWN DELAYED. POST COMPOSITE TESTING REQUIRED.	OUIRED.				
Ē	CORRECTIVE ACTION-PROCED SWITCH BEFORE THE SUBTAL	-PROCEDURE 1448 CORRECTED TO CALL OUT FOR REQUIRED ACTIVATION OF THE PROPULSION TAHK PRESSURIZATION SUSTAINER CUTOFF COMMAND.	EQUIRED ACTIVATION (AF THE PRO	FULBION T	AHK PRESSURIZATION	
	autcrilot-roud-a/B Programer	90-04-084 Amplifier, Bervo, Mechanical	FAR 7-41011-877	530 •00528	ž.	NO 60/C	
3	FAILURE HODS-OUT OF TOLE ES READ LOW. IMPROPER SEY	FAILURE HOUS-OUT OF TOLERANCE-DURING HERRILE CHECKOUT THE YAW INTEGRATOR AND ROLL INTEGRATOR POSITIVE OUTPUT VOLTAGE RELAD LOW, IMPROPER RETTINGS ON THE STOPS OF THE MECHANICAL INTEGRATORS NERE FOUND DURING FAILURE AMALYSIS.	AW INTEGRATOR AND RC L INTEGRATORS WERE!	AL INTEGR	ATOR POSI	TIVE OUTPUT VOLTAGE E AMALYBIS.	
_						BACK DOOR	_

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BUB-BYBTER		37 KO KI KO LIO				
	FAILED COMPONENT NAME	PART NUMBER	DATE 01F TIME DIF	0 14	OTH VEHOOR PART NO	
	den der					
CORRECTIVE ACTION-ADJU	ADJUSTMENT PROCEDURES WERE REVISED TO PRECLUDE IMPROPER SETTIMES OF THE ELECTRG MECHANICAL INTEGR	PRECLUDE INPROPER BETT	1168 OF THE	ELECTRO	MECHANICAL INTEGR	·
AUTOPILOT-ROUND-A/B	AES0-0388/FC-4C0-01-73	COMPOST TE-FACTORY	730 F1	FACTORY	YEB 60/C NO	16831
FAILURE MODE-FAIL TO C SANDORN RECORDER, OCCU	TO CPERATE AT PRESCRIBED TINE-ALL PROGRAMMER SUBROUTINE NO. 1 BMITCH OCCURRING 0.1 SECOND AFTER STAGING COMMAND, WERE LATER THAN EXPECTED.	RAMER SUBROUTINE NO. MAND, WERE LATER THAN	1 SWITCH ACT	II VA TI ONS	1 SWITCH ACTIVATIONS MONITORED ON THE EXPECTED.	
SYSTEM EFFECT-OPERETION TOO LONG	H TOO LONG.					
E EFFECT-COMPOSI	VEHICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTING REQUIRED.	RCQUIRED.				
CORRECTIVE ACTION-PROG N OF ALL SWITCHES, PROG D DEVIATION FROM NOMINA	CORRECTIVE ACTION-PROGRAMMER CANISTER MAS RENOVED FOR COMPONENT LEVEL TESTING MAICH INDICATED SATISFACTORY OPERATIO M OF ALL SWITCHES, PROGRAMMER WAS REINSTALLED AND POST-COMPOSITE TESTING INDICATED AN APPROXIMATE PLUG 65 MILLISECON D DEVIATION FROM NOMINAL FOR ALL D.1 SECOND SMITCHES.	HPONENT LEVEL TESTING HOLCA	WICH INDICATED AND APPRICA	NTED SATI	SFACTORY OPERATIO LUB 65 MILLISECON	1
AUTOPILOT-ROMB-A/B :	AE60-0387/FC-4CO-01-78 AMPLIFIEM	COMPOST TE-PACTORY	720 6004 29	22	22	:
FAILUIE MODE-FAIL DURI 6 IN GYRO TORRUIMS, AND	DURING OPERATION-PITCH BUCKOUT AMPLIFIER DID NOT FUNCTION PROFERLY DURING PITCH PROGRAM, REBULTIN AND VARIATIONS ON CHANNEL IS OF MIDNESTERN NO. & RECORDING.	ER DID NOT FUNCTION PR STERN NO. 2 RECORDING.	OPERLY BURE	#6 P17CH	PROGRAM, REBULTEN	·· <u></u>
SYSTEM EFFECT-IMPROPER AMALOG SIGNALS.	AMALOG SIGNALS.					
LE EFFECT-COMPOSI	WENICLE EFFECT-COMMODITE DELAYED. POST-COMPOSITE TESTING REGUIRED.	REQUIRED.				
CTIVE ACTION-THE	CORRECTIVE ACTION-THE BUCKOUT AMPLIFIER WAS REPLACED AND ADJUSTED IPANT OF	ADJUSTED IPART OF THE	THE 63E).			
AUTCHILOT-ROUND-A/B	98-04-087	FAR 7-41011-97H	6004ES E	E TA	YES 60/C	10.4
FAILURE MODE-ERRATIC OPERATION-DURING INDICATION, PROGRAMMER WOULD ALNO STOP ANNER WOULD NOT DUPLICATE THE FAILURES.	FAILURE HODE-ERRATIC CPERATION-DURING TESTING THE PROGRAMMER MOULD GIVE NO ZERO TIME INDICATION, NO SUB 1 AND INDICATION. PROGRAMMER MOULD ALSO STOP AT RANDOM POINTS DURING CYCLING. DURING LABORATORY TESTING AT 8.D. THE MOULD NOT DUPLICATE THE FAILURES.	WER WOULD GIVE NO ZER DURING CYCLING, DURING	O TIME INDIC	TESTING	O SUB 1 AND SUB O AT 8.D. THE PROCR	
CTIVE ACTION-NOWE	CORRECTIVE ACTION-WONE-FAILURE CAUSE COULD NOT BE DETERMINED.	1 NED.				
	The second secon					
	4					_

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SYSTEX SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-ROMD-A/S SD-04 PROGRAMMER	04-078	FAR 7-41011-977	606420 VTR	5/05 QE	• • • • • • • • • • • • • • • • • • • •
FAILURE MODE-OUT OF SPECIFICAT N REVEALED THAT PROGRAMMER MAS (ATION-APCHE TEBTING AT THE SMA INDICATED SWITCHING SEGUENCES OUT OF ORDER. INVESTIGATIO. IS CORRECT, BUT APCHE PROGRAMMING MAS IN ERROR.	INDICATED BNITCHING 6 NAS IN ERROR.	SEBUCHCES OUT OF	ORDER. INVESTIGATIO	
CORRECTIVE ACTION-APCHE PROBLE	ויבא נובענם ת.				
AUTOFILOT-ROAD-A/B 90-04-048 PROGRAMEDS SMITCH	970-X	FAR 7-41011-677	800400 MTR	7 E8 60 /C	168189
FAILURE MODE-FAIL TO OPERATE A	AT PRESCRIBED TIME. PROGRAMMEN WOMED NOT RESET TO JERO TIME.	WOULD NOT RESET TO	ZENO TIME.		
CORRECTIVE ACTION-NEW VENDOR IN DURING ASSENDLY.	MOUNCE MELECTED. 60/C 6UALITY	60/C BUALITY CONTROL PROCEDURES BET UP TO CULL OUT MAREIMAL BUTTCHES	MET UP TO CULL OUT	MAREINAL BUTTCHES	
AUTO'ILOT-ROUND-A/B AAAQ-I	AA4G-D019/P1-4CO-01-48 PROCEAMECE CIRCULY	COSTON ITE- J FACT	11 000	YES CONVAIR NO	10000
FAILURE MODE-ERRATIC OPERATION. MENT ON. INVESTIGATION REVEALED	DURING TEST CHISSICH OF	THE BOOSTER JETTISON LIGHT NENT OUT WIEN PRESS A DESIGN HODIFICATION FROM PROGRAMMER CIRCUIT.	T WEN PRESSURIZE	WENIER TANES LIGHT	
SYSTEM EFFECT-INFROPER DISCRETE SIGNALS. TEST INDICATOR LIGHTS SHOWED INFROPER FLACTION	E SIGNALS. TEST INDICATOR LIG	HTS BEGIND THEROPER	FUACTION.		
WENTCLE EFFECT-NOME.					
CORRECTIVE ACTION-THIS PROGRAM CATION.	AMER AND REPLACEMENT BOTH WELTTEN UP		ON IR AND RETURNED TO SO 29 NA	MARCH 1860 FOR HODIS ?	
AUTOFILOT-ROUND-A/B 98-04-0	04-046 TCM	FAR 7-41011-877	400311 C7R	769 TO	***
FAILUNE MOCE-FAIL DURING OPERATION-DURING CHECACUT NO CUIPUT NAS COSERVED FROM THE PROGRAMMER SECTION OF THE CANI- ER DURING SUSTAINER CUTOFF ENABLE BAUID TESIS, THE MOTOR CONTROL BMITCHES WERE FOUND TO HAVE HIGH VARIABLE CONTACT ESISTANCE.	RAFION-DURING CHECKOUT NO CUTPUT WAS CASERVED PROM THE PROGRAMMER SECTION OF THE CANIST MARLE SAUID TESTS. THE MOTOR CONTROL SMITCHES MERE FOUND TO HAVE HIGH VARIABLE CONTACT R	T ME GERTED FROM	THE PROGRAMMER NEPONDO TO HAVE HISE	CTION OF THE CANIBT VARIABLE CONTACT R	
CORRECTIVE ACTION-A SECOND SOURCE VENT	OR WE BELEGIES. A	N FACTORY TEST PROC	COURT WAS INITIATE	MEW PACTORY TEST PROCEDURE MAS INITIATED TO CULL OUT SWITC	
		Maria Cara de			

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**** WAT #1	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TOPILOT SYSTEM-AIRBON	Ä			
ATATEX AMP-AVATEX	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF 71	SITE PRI	I VENDOR NAME H VENDOR PART NO	
AUTOFILOT-ROUND-A/B PROGRAMMER	SE-D4-D40	FAR 7-41011-877	940	ž 2	YES 60/C	*******
FAILURE MODE-ELECTRICAL CIRCUIT BOARD 7-41880 ET CORRECTIVE ACTION-NOWE-C	RICAL GPEN, DURING VERNIER EMGINE ALIGNHENT CHECKOUT, VR ENGINE MAB DISPLACED ST DEGREES. PRINTED 88D ETCHED PLATE COMDUCTOR WAS BURNED OPEN. NOWE-CAUSE OF OVERLOAD CURRENT DURING TESTING COMD NOT BE DETERMINED.	TEN. CHECKOUT, WE ENG FEN. ESTING COMED NOT BE E	INE MAS DISP IETERMINED.	LACED ST	DEGREES. PRINTED	
AUTOPILOT-ROUND-A/B PROGRAMMER	\$ D-04-03 6	FAK 07-41011-977	600333 VTR	22	3/0 3	
FAILURE MODE-OUT OF TOLE INTERNITIENT AND THAT THE	FAILURE MODE-OUT OF TOLERAMCE-DURING APCHE DECK 37 CHECKOUT, CARD EGG AND REG INDICATED THAT THE PITCH PROGRAM MAS NIERHITTENT AND THAT THE SERVO STATIC GAIN MAS OUT OF TOLERANCE. NOT CONFIRMED, PROBLEM ATTRIBUTED TO APCHE.	JT, CARD EGG AND REG RANCE, NOT CONFIRMED	INDICATED TH	AT THE PI	TCH PROGRAM MAS TO APCHE.	
CORRECTIVE ACTION-APCHE	APCHE PROBLEMS CLEARED UP.					
AUTCPILOF-ROMD-A/B PROGRAMCR FAILURE MODE-FAIL TO OPE AMMER MAS OUT OF TOLERANC CORRECTIVE ACTION-APCNE	UTCPILOT-ROUND-A/B 90-04-053 FAR 07-41011-977 600502 WTR YES 60/C ROKANHER POCHAULINE WOODS WIR YES 60/C NO FAILINE WOOFF TO CRAFFE AND THAT PITCH PROCHAMER FAILINE COLLD NOT BE CONFIRMED.	FAR 07-41011-977 NCATED SMITCH I WAS CONTINEED.	600302 WTR H 1 MAS OUT OF TOLERAL POSSIBLE PROBLEMS.	R YES	YES 60/C NO D THAT PITCH PROGR	0 10 10
AUTOFILOT-ROUND-A/B PROGRAMMER	98-04-038 Gyro-displacement	FAR 7-41015-919	GOOZEG MIN	£ £		0.07.00
FAILURE MODE-DRIFY-DURING C APCHE TEST PROCEDURAL ERROR.	FAILURE MODE-DRIFT-DURING CAPCHE TESTS PITCH DISPLACEMENT GYROS MERE REJECTYD FOR EXCESSIVE DRIFT, PROVED TO BE A PCHE TEST PROCEDURA: ERROR,	GYROS WENE REJECTION	FOR EXCESSIV	E DRIFT.	MOVED TO BE A C	
CORRECTIVE ACTION-PM CA	CORRECTIVE ACTION-PMR CAPCHE TEST PROCEDURE CORRECTED.					
AUTOPILOT-ROIND-A/B PROGRAMMER	FTA6568/F4-4CQ-02-29	COMPOSITE-J FACT	290 ETA	£ 3		•
FAILURE MODE-FAIL TO CEAT WED AFTER A GUIDANCE VECO TO THE ATLAS CUTOFF CIFCU	FAILURE MOE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME. A CONTINYOUS SUBTAINER AND VERNIER CUTOFF SIGNAL WAS RECEI VED AFTER A GUIDANCE VECO WAS INITIATED, INVESTIGATION REVEALED A 28 VOLT SIGNAL FROM THE UPPER STAGE WAS COMMECYED TO THE ATLAS CUTOFF CIFCUIT FROM THE PROGRAMMER.	. CONTINUOUS SUSTAINE ALED A 28 VOLT STAIM	R AND VERNIE L FROM THE U	PPER STAG	AND YERNIER CUTOFF SIGNAL WAS RECEIFRON THE UPPER STAGE WAS COMMECTED	
SYSTEM EFFECT-IMPROMER DI NY CONTROL PROGMANDRE BACK	BYBTEN EFFECT-INPROPER DIBGRETE BIGHALS. CONTINUOUS BECO AND VECO LIGHAL PREVENTED DETERMINATION OF RECEIPT OF HT CONTROL PROCHAMMER BACKUP VECO AND RANGE BAPETY MANUAL PUEL CUTOFF.	IND VECO EIGHAL PREVE UEL CUTCFF.	KTED DETERMI	NAT104 06	ASCERDE OF FLIE	

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15 JUN 1866	DIFFICULTIES REVIEW-AUTOFILOT STREM-AIRBORME	OFILOT STRTEM-AIRBO	Ŧ		
SYSTEM RUG-SYSTEM	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE BITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	VENDOR NAME ENDOR PART NO	
VEHICLE EFFECT-NOME.	VEHICLE EFFECT-MOME. CORRECTIVE ACTION-CIRCUITRY MODIFICATION MADE TO ELIMINATE CONTINUOUS 28 YOLT SIGNAL FROM UPPER STAGE.	CONTINUOUS 28 VOLT	SIGNAL FROM UPPER STAGE.		*******
AUTOFILOT-ROUND-A/B PROGRAMMER	98-04-048 841 TCP:	FAR 7-41011-977	550 ETR YES GG/C 600E1E NO	3/	997
FAILURE MODE-FAIL TO CEA ION OF SUB ROUTINE TWO.	FAILURE MODE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME. DURING SYSTEM TESTING PROGRAMMER WOULD NOT STOP AT COMPLET ON OF SUB ROUTINE TWO.	uring bystem tebtin	PROGRAMMER WOULD NOT STO	P AT COMPLET	
CORRECTIVE ACTION-SECOND STANDARD SMITCHES DURING	CORRECTIVE ACTION-SECOND VENYOR SOURCE SELECTED FOR SMITCHES. GD/C QUALITY CONTROL PROCEDURES INITIATED TO CULL STANDARD SMITCHES DURING SUDASSENBLY NAMERACTURING.	ES. 60/C BUALITY CON	TROL PROCEDURES INITIATED	דס כואבר שנום	
AUTOFILOT-BOUND-A/B PROCKAINER	AE&O-0039/4/:-403-00-0&	PLICHT	60 WTR YES GO 600126 278.4 NO	J/93	991738
FAILURE HODE- FAIL TO OF	TO OPERATE AT PRESCRIBED TIME. THE GUIDANCE VECO DISCRETE MAS GENE. TO INITIATE VECO POSSIBLY DUE TO AUTOMILOT PROGRAMMER MALFUNCTION.	ANCE VECO DISCRETE I	THE GUIDANCE VECO DISCRETE MAS GENERATED AND TRANSMITTED AT 270.4	7ED AT 278.4	
SYSTEM EFFECT-OFFRATION TOO LONG. ACCOMPLISHED AT 886.4 SECONDS.	į	D FIRING UNTIL BACK-	WERNIER EMGINES CONTINUED FIRING UNTIL BACK-UP SIGNAL FRON FLISHT PROGRAMMER WAS	GRAINER MAS	
VEHICLE EFFECT-LATE VERN	VERNIFE ENGIN CUTOFF. VEHICLE DIG NOT PLACE R/V IN PROPER TRAJECTORY.	PLACE 377 IN PROPER	TRAJECTORY.		
CORRECTIVE ACTION-UNKNOWN.	reconnected and an extension of the second control of the second c	Age in the property of the second			
AUTOFILOT-ROAD-A/B	F1A9583/F1-4CO-03-42 3417CH-arm/8afE	COMPOSITE-8 FACT	420 11 7E3 4UD1EE -300 NO		881405
FAILURE MODE-FAIL TO OPERANE AT PRESCRIBED VIN URING A 7-3 HIMUTE HOLD CALLED AT T-16 BECONDS.	FAILURE MODE-FAIL TO OPERAIE AT PRESCRIBED TIME. ARM/SAPE BUITCH MAB LOCKED IN THE ARMED POSITION. THIS MAS FOUND D RING A T-5 HINUTE HOLD CALLED AT T-10 DECONDS.	SMITCH WAS LOCKED IN	THE ARMED POSITION. THIS	MAS FOUND D	
STRIEM EFFECT-ERRATIC OF	SYSTEM EFFECT-ERRATIC OFFRATION, ARM/SAFE SWITCH LOCKED IN ARMED FOSITION.	ARMED POSITION.			
WENICLE EFFECT-COMPOSITE	WENTELE EFFECT-COMPOSITE DELAYED. POSSIBLE PORTION OF 9 HINUTE HOLD	MUTE HOLD			
CORRECTIVE ACTION-PROGRA	CORRECTIVE ACTION-PROGRAMMER REPLACED AFTER TEST.				
AUTOFILOT-ROUND-A/B PROGRAMMER	F7A6565/F1-4CO-03-4£	COMPOSITE-8 FACT	420 CTR YES GO 600122 -100 NO	J/93	
PAILURE MODE-PAIL TO OPE MAL FOMER SECAUSE IT MAS	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME, PROGRAMMER WOULD NOT RESEY. PROGRAMMER STARTED AT MISSILE TO IM Ne pomer because it has armed (Locked in ann due to earlier problem). Programmer would stop but would not reset	M WOULD NOT REBET. I R PROBLEM). PROGRAM	ROGRANNER STARTED AT MISS er would stop but would h	AT MISSILE TO INTER- WOULD HOT RESET.	
		trig a signification of the significant plans of the significant plant plans of the significant plans of the significant plans of the significant plant plans of the significant plans of the signif		PAGE DORS	

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5727EH 8165-878TEH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE SITE DATE DATE DATE		A TO	VENDOR HANE	
SYSTEM CFFECT-ERRATIC OF	C OPERATION. PROGRAMMER WOULD NOT RESET.	energieniste del metropologie des des des des des des des des des de					
VEHICLE EFFECT-COMPOSITE	VENICLE EFFECT-COMPOSITE DELAYED. 8 MINUTE HOLD AND 4 MINUTE RECYCLE.	RECYCLE.					
CORECTIVE ACTION-ESTABLE PROBLEM.	ITABLISH PROGRAMMER ZERO AND PROCEDE. PROGRAMMER WAS REPLACED AFTER TEST DUE TO ARM/SAFE SMITCH	grapover mas replac	ED AFTER TE	ST DUE 1	O AR	IZSAFE BWITCH	
AUTOFILOT-ROUND-A/B PROGRAMMER	AC&Q-0001/81-410-C6-38	CAPTIVE	360 8 600100	8YC 251.73	1 Q	5/Q9	01000
FAILURE MODE-FAIL TO CPER TROL SIGMAL CIRCUIT BEFORE	TO CPERATE AT PRESCRIBED TIME, AN INTERLOCK GROUND WAS NOT REMOVED FROM THE FLIGHT PROGRAMMER CON- T BEFOKE THE TEST, AS A RESULT THE PROGRAMMER COULD NOT SEND A PRESSURIZE VERNIER TAMKS SIGMAL.	K GROUND WAS NOT R	EMOVED FROM A PRESSURIZ	THE FLI	3 2	ROGRAHMER CON	
SYSTEM EFFECT-EMPROPER DI	SYSTEM EFFECT-INFROMER DISCRETE SIGNAL. PRESSURIZE WERNIER TAMES SIGNAL COULD NOT BE SENT.	ANKS SIGNAL COULD	NOT BE BENT				
VEHICLE EFFECT-PREMATURE PRESSURIZED.	VENICLE EFFECT-PREMATURE VERNIER ENGINE BRUTDOMN. VEDRIER BRUTDOMN OCCURRED AT SECO MHEN THE ENGINE TANKS MERE NOT Ressurized.	UTDOM OCCUMBED AT	SECO MEN	THE ENGI	ž Ž	HES MERE HOT	
CORRECTIVE ACTION-RENOWED	CORRECTIVE ACTION-REMOVED INTERLOCK FROM PROGRAMMER.						
AUTOFILOT-ROUND-A/B PROCRAMER	F746392/F3-4CO-01-31 5417CH	COMPOSITE-B FACT	310 1 591204	S 3	2 0		*******
FAILURE MODE-FAIL TO OPER E TEST BOX.	OPENATE AT PRESCRIBED TIME. THE NOSE COME SEPARATION SIGNAL WAS NOT RECEIVED AT THE FUSE IN TH	NE SEPARATION SIGN	AL MAS NOT	RECE 1 VED	7	HE FUSE IN TH	
SYSTEM EFFECT-IMPROPER DISCRETE SIG	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS. THE FUSE IN THE MOSE CONE SIMILATOR BOX DID NOT BLOW INDICATING NO RECEIPT OF THE MOSE CONE SEPARATION BIGNAL.	E CONE SIMULATOR B	OK DID NOT	PLOW IND	ICAT	NG NO RECEIPT	
VEHICLE EFFECT-NOWE.							
CORRECTIVE ACTION-ON A RE O-SWITCH WAS REPLACED WITH ETS OF FUSES WERE BLOAM NO	CORRECTIVE ACTION-ON A REBUN IMMEDIATELY AFTER THE FACT THE FUSE BLEM NORMALLY. THE NOSE COME WAS RENOVED AND A BAR O-SMITCH WAS REPLACED WITH TWO SIMILAR SWITCHES IN PARALLEL. THE NOSE COME WAS REINSTALLED ON THE VEHICLE AND FOUR S ETS OF FUSES MERE BLOWN NORMALLY. NO FURTHER ACTION TAKEN.	FUSE BLEM NORMALLY THE NOSE CONE MAS	. THE NOSE REINSTALLED	COME TAN	WEH!	VED AND A BAR	
AUTOFILOT-ROUND-A/B	98-04-028 8417CM	FAR 7-41011-961	150 1	*	ž 2		•••
FAILURE HODE-FAIL DURING B BTSF AND 351.	FAILURE MOE-FAIL DURING OPERATION. PROGRAMMER STOPPED IN SUBROUTINE THREE DURING TESTING DUE TO FAILURE OF SMITCHE.	BROUTINE THREE DUR	ING TESTING	oue to	Ž	ME OF SWITCHE	
CORRECTIVE ACTION-BAITCHES CT ACCOND SOURCE INITIATED.	CORRECTIVE ACTION-BUITCHES OPERATED ERRATICALLY WERN TESTED, SWITCH VENDOR QUALITY CONTROL IMPROVED, ACTION TO SELE T SECOND SOURCE INITIATED, 60/C SUBASSEMBLY QUALITY CONTROL IMPROVED.	BUITCH VENDOR BUA	LITY CONTRO	INFRO	á	CTION TO BELE	
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9941 X27 81	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBON	¥			
3737EM 3.08-3737EM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	ME DIF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-ROUND-A/B PROCRAIMER	90-04-028 RELAY	FAR 7-41011-878	100 ETR 991103 150		7E\$	***************************************
FAILURE WOOK-FAIL DURING K354.	DURING OPERATION. PROGRAMMER STOPPED AT 150 SECONDS DURING SYSTEN TESTING DUE TO DEFECTIVE RELAY	SO SECONDS DURING I	VOTEN TESTING	of and	DEFECTIVE RELAY	
CORRECTIVE ACTION-PROGRAL LIES IMPROVED.	PROGRAMMER RELAY VENDOR REQUIREMENTS MAYE BEEN INTENSIFIED AND QUALITY CONTROL OM THE SUB- ASSEMB	BEEN INTENSIFIED A	ND QUALITY CO	NTROL O	I THE BUB- ASSEND	
ANTOFILOT-ROUND-A/B	98-04-023 RELAY	FAR 7-41011-977	220 ETR 59110E 190		7 F. B.	75500
FAILURE HODE-FAIL DURING R STOPPED AT 180 SECONDS.	: OPERATION. DURING INTEGRATED MISSILE GUIDANCE AND AUTOFILOT STSTEM CHECKS AT AND PROGRAMME. Failure caused by Defective Relay. K374.	LE GUIDANCE AND AUT KSP4.	OFILOT SYSTEM	CHECKS	AT AIR PROGRAIME	
CORRECTIVE ACTION-VENDOR	-VENACH REBUIRENENTS FOR THE PROGRAMMER RELAYS WERE TIGHTEMED. VEHDOR BUALITY CONTROL PROCEDURES M	LAYS WERE TIGHTENED	. VEHDOR BUAL	ITY COM	ROL PROCEDURES W	
AUTOFILOT-ROAD-A/B	69-04-024 347 TCH	FAR 7-41011-873	591102 ETR		YES NO	888888
FAILUFE HODE-FAIL TO OFERATE A TO SHORT IN PROGRAMMEN SECTION.	TO CFERATE AT PRESCRIZED TIME, DURING CONTINUITY CHECKS WIRE INSULATION BURNED OFF OF NEX SECTION.	TIMULTY CHECKS WIRE	INSULATION B		T OF SMITCH BUE	
CORRECTIVE ACTION-PROCRAI	PROCRAMMER SUBASSEMBLY GUALITY CONTROL INTENSIFIED. WENDOR MANUFACTURING PROCESSES AND GUALITY CO	TENSIFIED. VENDOR H	ANUFACTUR ING	PROCESS	S AND QUALITY CO	
AUTOFILOT-ROUND-A/B PROGRAMMER	98-04-019 841 TCH	FAR 7-41011-067	8C ETR 591014		7ES 60/C NO	***
FAILURE HODE-FAILED DURIN	FAILURE HODE-FAILED DURING OPERATION. PROGRAMMER STOPPED AT START OF BURROUTINE 3 DUE TO 8371 AND 8354 FAILURE OF NITCHES 8371 AND 8354.	START OF SUBROUTIN	E 3 DUE TO 45	17 OH 410	1354 FAILURE OF &	
CORRECTIVE ACTION-VENDORI ITCHER REMOVED FROM ALL CO	WENDURS SWITCH AND RELAY QUALITY CONTROL PROCEDURES TIGHTENED TO INPROVE INSPECTION. SUSPECTED SW	PROCEDURES TIGHTENE	D TO IMPROVE	INSPECT	OM. BUSPECYED BW	•
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CONVAIR	

STSTEN SUB-STSTEN AUTOFILOT-RCUND-A/B PROGRAMMER SMI	Commission of the second Commission of the Commi	And the second s	The second secon	_		_
PROGRAMICE BH- BM- BM- BM- BM- BM- BM- BM- BM- BM- BM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF TH	TIME DIF OTH	PRI VENDOR NAME.	
FAILURE MODE-FAIL TO OPERATE	88-04-018 AMITCN	FAR 7-41011-861	991313 ETR		VEB 6D/C	175
	L TO OPERATE AT PRESCRIBED TIME. PROGRAMMED EVENTS WOULD NOT OCCUR AT PRESCRIBED TIME.	EVENTS WOULD NOT OC	CLA AT PRESC	1 1 1 5 CO T		
CORRECTIVE ACTION-MANUFACTUR	CORRECTIVE ACTION-MAMPRACTURING PROCESSES AND QUALITY CONTROL PROCEDURES MERE IMPROVED. ALL POTENTIALLY INFERIOR SM TCHES MERE REMOVED.	A. PROCEDURES WERE I	MPROVED. ALI	POTENT	ALLY INFERIOR SIS	
AUTOPILOT-ROMB-A/B AZP PROGRAMMER	A2M-27-359/FC-4CO-01-29	COMPOSETE-FACTORY	230 500025	FACTORY YES	• _	****
FAILURE MODE-FAIL DURING OF	L DURING OPERATION. MIDMESTERN NO.2 DISPLAYED A OME EIGHTH INCH SPIKE SHORTLY AFTER BOOGTER CUTGPP.	ID A OME EISMTH INCH	BPINE BHOR	ILY APTE	BOOSTER CUTOFF.	
SYSTEM EFFECT-NONE.						
VEHICLE EFFECT-NONE.						
CORRECTIVE ACTION-UNKNOWN.	of another than the second sec					
AUTOFILOT-ROIMO-A/B AZO	AZC-ET-OTT/P4-403-00-10 PROGRABBER SMITCH NO 55	FLIGHT	100 14 590909 136		tes Yes	79.767
FAILURE HODE-FAIL TO OFERATI RIDED TIME.	FAILURE HODE-FAIL TO OFERATE AT PRESCRIBED TIME, POSSIBLE FAILURE OF PROGRAMMER SWITCH MUMBER 95 TO OPERATE A PRESC 13DED TIME.	AILURE OF PROGRAHMEN	SWITCH NUM	JER 35 TC	OPERATE A PRESC	
SYSTEM EFFECT-OPERATION DOES	SYSTEM EFFECT-OPERATION DOES NOT START. NO BOOSTER SECTION JETTISON SIGNAL.	JETTISOH SIGNAL.				
VEHICLE EFFECT - IMPROPER TRA-	WEHICLE EFFECT-INPROPER TRAJECTORY, THE BOOSTER SECTION DID NOT SEPARATE FROM THE VEHICLE, AS A RESULT OF THE ADDED MELL MEIGHT OF THE PLANMED RAMME.	NOT SEPARATE FROM T	HE VEHICLE.	AS A RES	ULT OF THE ADDED ID RAMEE.	
CORRECTIVE ACTION-THE OUTPU	OUTPUT OF THE PROGRAMMER SMITCH WILL BE INSTRUMENTED ON FUTURE FLIGHTS.	ME INSTRUMENTED ON P	UTURE FLIGH	:		
AUTOFILOT-ROUND-A/B AZI	AZH-E7-815/FC-4CO-05-E8	COMPOST 1E - FACTORY	250823	FACTORY NO	5/93	******
FAILURE MODE-FAIL DURING OF	DURING OPERATION. DIRTY TEST PROGRAMMER TAPES CAUSED A PRENATURE VERNIER CUTOFF INDICATION.	APES CAUSED A PREMAT	TURE VERNIER	curoff	MDICATION.	
SYSTEM EFFECT-IMPROPER DISCI	BYBIEH EFFECT-IMPROPER DIBCRETE BIGMAL. DIRTY PROGRAMMING TAPEB CAUSED PREHATURE VECO INDICATION.	APES CAUSED PREHATUR	E VECO 1HD1	CATION.		
VEHICLE EFFECT-COMPOSITE DEI	VEHICLE EFFECT-COMPOSITE DELAYED OR RESCHEDULED. RE-RUN OF COHPOSITE NADE.	COMPOSITE HADE.				
CORRECTIVE ACTION-THE TEST	CORRECTIVE ACTION-THE TEST TAFES MERE CLEANED AND SATISFACTORY OFFRATION OSTAINED.	CRY OFFRATION OBTAIN	ÆD.			+

CONVAIR DIVISION

18 JUN 1868

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

6.18.1EH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART MURBER	VEHICLE SITE PRI DATE DIF THE BIF OTH	PRI VENDOR NAME	
AUTOFILOT-ROUND-A/B	A2N-27-314/FC-4CO-01-27	COMPOST TE-FACTORY	E7D FACTORY Sec715	YES 60/C	****
FAILURE MODE-FAIL DURING POUT.	DURING OPERATION, THE PITCH PROGRAM TRACE ON MIDNESTERN RECORDING NO.	ON MIDWESTERN RECOR		E INDICATED A MOMENTARY DAG	
SYSTEM EFFECT-ERRATIC OPE	HIC OPERATION. MOMENTARY DROP OUT WOULD CAUSE INTERRUPTION OF PITCH PROGRAM.	AUSE INTERRUPTION OF	PITCH PROCRAM.		
WENTCLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE RESCHEDULED. A PARTIAL COMPOSITE RETEST MAS PERFORMED.	ETEST MAS PERFORMED.			
CORRECTIVE ACTION-UNKNOWN					
AUTOFILOT-FOUND-A/B PROGRAMMER	FTA5061 /F1-4CO-02-11	COMPOSITE-B FACT	11D ETR 590711 0	MO 60/C	******
FAILURE HODE-FAIL TO OPER SE STACING SWITCH HAD NOT EN OCCURRED DUE TO THE LAT	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME, FLIGHT PROGRAMMER DID NOT RESPOND TO STACING DISCRETE SIGMAL SE STACING SWITCH HAD NOT DEEN FWABLED BY PROGRAMMER, STACING SEQUENCE MAS INITIATED BY THE BACKUP SIGMAL. THE EN OCCURRED DUE TO THE LATE EJECTION OF PIDDI AND SUBSEQUENT LATE PROGRAMMER START.	GRAMMER DID NOT RESP G SEGUENCE WAS INITI LATE PROGRAMMER STA	OND TO STACING D ATED BY THE BACK RT.	ISCRETE SIGNAL BETAU UP SIGNAL: THE PROBL	
SYSTEM EFFECT-OPERATION B	IATION STARTS TOO LATE. DUE TO LATE UMBILICAL PIDOI EJECT THE PLIGHT PROGRAMMER STARTED S SECONDS	CAL P1001 EJECT THE	PLIGHY PROGRAME	R STARTED S SECONDS	
VEHICLE EFFECT-NONE.					
CORRECTIVE ACTION-NOME.					
AUTOFILOT-ROLAD-A/B PROGRAPHER	AZH-E7-200/FC-4CO-01-E5	COMPOST TE-FACTORY	25D FACTORY 590710	99	****
FAILURE MODE-ERRATIC OPER PUT MAS ERRATIC THRU OUT T	FAILURE MODE-ERRATIC OPERATIGN-SANBORN RECORDER MONITORING THE PITCH PROCRAH OUTPUT AND YAW FEEDBACK TRANSDUCER OUT Put was erratic thru out the Test. This was traced to a Faulty preasolifier in the checkout equipment.	THE PITCH PROCRAH OU IT PREAMPLIFIER IN T	TPUT AND YAN FEE	DBACK TRANSDUCER OUT	
SYSTEM EFFECT-ERRATIC OF	SYSTEM EFFECT-ERRATIC OPERATION-ERRATIC QUIPUT OF PROGRAMER PROMED TO BE FAULTY 68E.	R PROMED TO BE FAULT	r 68£.		
VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED COMPOSITE RE-IEST PERFORMED.	ORMED.			
CORRECTIVE ACTION-NOT KNOWN					
AUTOFILOT-ROUND-A/B PROCE UMER	AZH-ET-E87/FC-ACO-D1-E4 POTENTIONETER	COMPOSTE -FACTORY	24D 590624	Y VES	
FAILURE HODE-ERRATIC OPER	CPERATION-THE PITCH PROGRAM INDICATED MOMENTARY DROPOUTS.		THE PITCH PROGRA	THE PITCH PROGRASHER POTETIONETER IN	ν.
BYSTEM EFFECT-ERRATIC OPE	STRIEM EFFECT-ERRATIC OPERATION-THE PITCH PROGRAM HAD BEYERAL DROPOUTS. TRACKD TO DIRTY POTENTIONETER.	AL DROPOUTS. TRACED	TO DIRTY POTENTI	OMETER.	

15 1/2 1966

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

The state of the s		DOWN DATA ACMBCE	VEHICLE I SITE P	PRE VENDOR NAME	
STREE SUB-RYSTEM	FAILED COMPONENT NAME	PART NUMBER	DATE BIF TIME BIF OTH VENDOR PART NO	TH VENDOR PART NO	
	POSITE DELAYED. POST-COMPOSITE TESTS DEMONSTRATED SATISFACTORY SYSTEM OPERATION.	DEMONSTRATED BATIBFACT	ORY BYETEN OPERATION.		75000
CORRECTIVE ACTION-THE AUTOFILOT-ROUND-A/B PROGRAMER	PA PAGE TROPIAN TOTAL LONGING THE CALLENGE FA PA TRANSFORMER	FAR 7-41015-889	30 CTR NO 390313 YE	768	*****
FAILURE MODE-FAILED DU	FAILURE MODE-FAILED DURING OPERATION. TRANSFORMERS TIDE AND TIDS MERE BURNED OPEN.	AND 1103 WERE BURNED	OFEN.		ing the same of
CORRECTIVE ACTION-FINAL CLEANUP INSPECTION 110N FOLLOWING PRODUCTION VIBRATION :ESTING.	CORRECTIVE ACTION-FINAL CLEAMAP INSPECTION INIATIATED ON ALL ELECTRONIC CANISTERS. 67RO CANISTERS OPENED FOR INSPEC ION FOLLOMING PRODUCTION VIBRATION (ESTING.	H ALL ELECTRONIC CANIS	TERS. 67RO CANISTERS	OPENED FOR INSPEC	
AUTOFILOT-ROMD-A/B	A2H-27-256/FC-4CO-01-19	COMPOSITE-FACTORY	19D FACTORY NO 58051E 1E3 NO	0.0	094535
FAILURE MODE-FAIL DURING OPERATION AS AND NEGATINE MOLL TORGUING WHEN TAPES MAD BEEN INCORRECTLY PUNCHED.	FAILURE HODE-FAIL DURIHG OPERATION, AT ABOUT 123 SECONDS THE BOOSTER AND VERNIER ENGINES INDICATED POSITIVE ROLL AS AND NEGATIVE ROLL TORGUING WHEN POSITIVE AND NEGATIVE ROLL BIAS WAS EXPECTED. THE PLIGHT CONTROL TEST PROGRAMME TAPES HAD BEEN INCORRECTLY PUNCHED.	S THE BOOSTER AND VERN ROLL BIAS WAS EXPECTE	BOOSTER AND VERNIER ENGINES INDICATED POSITIVE ROLL B BIAS MAS EXPECTED. THE FLIGHT CONTROL TEST PROGRAMMER	POSITIVE ROLL BI TEST PROGRAMMER	
SYSTEM EFFECT-INTROFER ANALOG SIGNALS.	ANALOG SIGNALS.				
VEHICLE EFFECT-NOME. N	E. NO RETEST WAS REQUIRED SINCE THE ENGINES RESPONDED CORRECTLY TO THE ERRONEOUS SIGNALS RECEIVED	NGINES RESPONDED CORRE	CTLY TO THE ERRONEOUS	SIGNALS RECEIVED	
CORRECTIVE ACTION-UNAN	UNINOMA, TEST PROGRAMMER TAPES WERE PROBABLY REPLACED.	MCBABLY REPLACED.		enemente esta en	
AUTOPIL ST-ROUND-A/B PROGRAPHER	ZC-7-EZO/PE-501-00-07 PROGRAMMER MICROSMITCH	7.1947	7C 12 71 500318 71	7E3 7E3	:
FAILURE MODE-FAIL DURS	FAILURE MOSE-FAIL DURING OFERATION, POSSIBLE FAILURE OF BOOSTER CUTOFF HICROBWITCH NO. USED PREMATURE BOOSTER BHUTDOMS, CAUBE OF POSSIBLE SWITCH FAILURE UNKNOWN.	BOOSTER CUTOFF HICRORY.	MITCH NO. 41 IN FROGR	41 IN PROGRAMMEN MAY HAVE CA	
SYSTEM EFFECT-IMPROPER IGNAL.	BYBIEM EFFECT-IMPROMER DIBGRETE BIGNAL. POBSIBLE MICROBUITCH FAILUNE MAY HAVE CAUSZO FRENATUME GENERATION OF GNAL.	MITCH PAILURE MAY HAVE	CAUSED PREMATURE GEN	ERATION OF BECO B	
WEHICLE EFFECT-PREMATURITHE	WEHICLE EFFECT-PREMATURE BODGITH EMGINE CUTOFF. PREMATURE BECO REGULTED IN LOSS OF WEHICLE STABILITY AND SUBSEQUENT Hibbion Failure.	ME BECO REBULTED IN LO	SE OF VEHICLE STABILI	TY AND SUBSEQUENT	
COCHECTIVE ACTION-UNKN	, texcense,				
			•	PAGE DOSO	
	A CONTRACTOR AND CONTRACTOR OF CONTRACTOR CO	AND THE PROPERTY OF THE PROPER			3

		Direicuties Referencedicol sielen Alkeon	Dalle Steller Alver		-	Ì		۲
	STATEM SUB-STATEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF		2 5 2 5	BITE PAI VENDOR HAME TIME DIF OTH VENDOR PART NO	
***************************************	AUTOPILOT-ROUND-A/B PROGRAMMER	ZC-7-EEG/PE-SBN-03-07 FLIGHT CONTROL PROGRAMER	COMPOSITE-J FACT	7C 900304	Ë	4 0 E	YES CONVAIR NO	
	FAILURE HODE-FAIL TO OP ATION BIGHALS HOT RECEIV	, TO OPERATE AT PRESCRIBED TIME, PROGRAMMER DID NOT FUNCTION PROPERLY, BOOSTER CUTOFF AND R/V BEPAR Received during test. No purther details available.	ER DID NOT FUNCTION !	MOPERLY. #	OOSTER C	UTOFF	AND R/V SEPAI	· · · · · · · · · · · · · · · · · · ·
	SYSTEM EFFECT-IMPROPER	SYSTEM EFFECT-IMPROMER DISCRETE SIGNALS. BECO AND AZY BEPARATION SIGNALS NOT RECEIVED	ARATION SIGNALS NOT A	ECET VED.				
	VEHICLE EFFECT-COMPOSITE RESCHEDILED	E RESCHEDULED.						
	CORRECTIVE ACTION-UNKNOWN	÷						_
	AUTOPILOT-ROUND-A/B PROGRAHMER	FTA4607/PR-38N-04-5	COMPOSITE-B FACT	5C 590218	£18 -	22		88778
	FAILURE MODE-PREMATURE OPERATION, BURING THE OTHE AIRBORNE PROGRAMMER EMBLED THIS FUNCTION. OUSE. THIS POSSIBILITY MAS CREATED BY A CHANGE		COUNTOOLN LAPLANGED SUSTAINER CHTOFF (SECO) SIGNAL APPEARED EACH TIME THIS RESULTED FROM CONDITIONS (MADVERTANTLY ESTABLISHED IN THE SLOCKH IN HISSILE HARRESSING.	OFF (SECO)	SICHAL Y ESTABL	APPEAI 1344ED	RED EACH TIME IN THE BLOCKE	
	SYSTEM EFFECT-INPROPER	SYSTEM EFFECT-INPROPER DISCRETE SIGNALS. UNPLANNED SUSTAINER CUTOFF BIGNALS OCCURRED EACH TIME THE PROGRAMMER ENABL DITHESE SIGNALS.	HER CUTOFF BIGHALS OF	CURRED EAC	H 1166 H	¥	Jerahmer enabl	
	VEHICLE EFFECT-COMPOSIT	VEHICLE EFFECT-COMPOSITE DELAYED. 40 MINUTE HOLD AT T-10.						
	CORRECTIVE ACTION-REPLA	H-REPLACE SERVO CANISTER (MHICH CONTAINS PROGRAMMER) AND GROUND WIRING WAS CORRECTED TO PRECLUDE	PROGRAMMER) AND GROUP	O WIRING V	MS CORRE	8	TO PRECLUDE TH	
	AUTCFILOT-ROMD-A/B PROGRAMER	FTA4607/PZ-38W-04-9 SWITCH	COMPOSITE-8 FACT	5c 590216	N.	ž 8		# 5500
	FAILURE MODE-FAIL TO OF F PROGRAHMIR BUTTCH TO (AND BOTH HUST OPERATE T	FAILUKE HODE-FAIL TO OPERATE AT PPERCRIBED TIME. THE NOSE COME SEMARATION CHARGE WAS NOT BLOWN BECAUSE OF FAILURE. PROCRAMMER SWITCH TO (JETIISON MOSE COME) OR SMITCH GO (EMABLE MOSE COME DEPARATION). THESE SMITCHES ARE IN SERIE AND BOTH HUST OPERATE TO DETOMATE CHARGE.	TINE, THE NOSE CONE SEMANATION CHAI OR SMITCH GO (EMBLE NOSE CONE, SEM	FEE MAS NOT	PESE SWI	ECAUS!	CHARGE WAS NOT BLOWN BECAUSE OF FAILURE O DEPARATION), THESE SWITCHES ARE IN SERIES	o g
	BYBYEM EFFECY-INFROMER DISCRETE SIGNALS.	DISCRETE SIGNALS.						
i	VEHICLE EFFECT-HOME. TH	VEHICLE EFFECT-MOME. THE CAPABILITY OF THE AUTOFILDT TO PROVIDE THIS FUNCTION HAD BEEN PREVIOUSLY DEMONSTRATED.	MOVIDE THIS FUNCTION	HAD BEEN !	MEVIOUSL	¥ 054	OMS TRA TED.	
	CORRECTIVE ACTION-THE S	SERVO CAMISTER (PROGRAMICR) WAS REPLACED AFTER TEST.	LACED AFTER TEST.				And the second s	
	AUTOFILOT-ROUND-A/B PROGRAMMER	FTA4413/F1-E01-00-10	L C	108	£18 -4800	99		
ì	FAILURE MODE-PREMATURE OPE THREE MAS STARTED. THIS MA IY OF THE GROUND CIRCUITRY.	FAILURE MOE-PREMATURE OPERATION. DURING THE LOOP TEST SUSTAINER CUTOFF WAS GENERATED AT EMASLE TIME AND SUBROUTINE Three was started. This was caused by the Phesence of a Ground Test Discrete unich was locked in due to a Peculiari Y of the Ground Circuitry.	MATAINER CUTOFF WAS GIRCOMO TEST DISCNETE	ENZRATED AT	r EMABLE LOCKED IN	1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	AND BUBROUTINE TO A PECULIARS	

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	FAILED COMPONENT NAME	PART NUMBER	DATE DIF	11 M DIV	47.100 OK	2	
STSTEM EFFECT-IMPROPER	STATEM EFFECT-IMPROPER DISCRETE SIGNALS. AN EARLY SECO AND EARLY ENTRANCE INTO SUBROUTINE THREE OCCURRED DURING THE Loof 1831.	ND EARLY ENTRANCE INTO	BUBROUTIN	E THREE O	CCURRED DURI		13.8.1
WEMICLE EFFECT-NOME.						· · · · · · · · · · · · · · · · · · ·	
CORRECTIVE ACTION-MONE.							
AUTUPILOT-ROMD-A/B PROGRAMER	ZH-7-434/FC-3CO-02-03	CONTOB 1 TE-FACTORY 7-41011	3c 581129	FACTORY	3/09 OH	•	*1*/**
FAILURE MODE-FAIL DUR!	DURING OPERATION. A BLITCH D.SV AMPLITUDE OF 9 MILLISECOND DURATION OCCURRED ON ROLL PROGRAM OUTP	UDE OF 8 MILLISECOND D	URA 110 OC	CURRED ON	HOLL PROSES	# 00 #	
SYBIEH EFFECT-INPROPER ANALOG SIGNAL.	R ANALOG SIGNAL.			٠			
VEHICLE EFFECT-COMPOSITE RESCHEDULED.	ITE RESCHEDULED.	,				· · · · · · · · · · · · · · · · · · ·	
CORRECTIVE ACTION-LAKINONAL	iólei.		,				
AVTOP LLOT-ROUND-A/B PROGRAMMER	2N-7-548/FC-3CO-01-04 3NJ TCH	COMPOSETE-FACTORY	4C 561 (25		YES NO	•	697354
FAILURE MODE-FAIL DURI	, DURING OPERATION-THE VERNIER ENGINES, IN THE YAM AXIS, INDICATED ABRUPT SHIFTS UPON VEANIER ACTIV THE PROBLEM WAS THE RESULT OF A FAULTY SHITCH SO IN SUBROUTINE NO. 1.	EMEINES, IN THE YAM AXIS, INDICATED ABRI A PAILTY SMITCH SS IN SUBROUTINE NG. 1.	ATED ADRUP	1 841718	UPON VERHIES	* ACTIV	
SYSTEM EFFECT-IMPROPES INC ACTUATOR,	STSTEN EFFECT-IMPROPER ANALOG BIGNALS. FAULTY SMITCH CAUSED UNEXPICTED SIGNALS TO BE TRANSMITTED TO THE VERNIER EMG ME ACTUATOR.	6ED UNEXPECTED \$10UAL3	TO BE TRA	NSM1'/TED	TO THE YERNI	* 5	
WEHICLE EFFECT-COMPOSITE RESCHEDULE.	ITE RESCHEDULE.						
CORRECTIVE ACTION-SIES	SICROUTINE NO. 1 MAS REPLACED AND THE PROGRAMMER REINSTALLED OF THE MISSILE. COMPONENT, SYPTEM, REIESTING MAS PERFORMED.	PROGRAMMER REINSTALLED	04 THE HI	BSILE. CO	HPONERT, BY	TEN. A	
AUTOFILOT-ROUND-A/B PROGRAMMER	ZN-T-639/FC-2CO-01A-13 8M1TCH	COMPOST TE-FACTORY 7-41011	138 340916	FACTORY	YES 7-41011 HO	•	*****
FAILURE MODE-PAILED TO HE TEST.	FAILURE MODE-PAILED TO OPERATE AT PRESCRIBED TIME, PROGRAMMER BMITCMED 1, 51, 51, 51, AND 6A FAILED IN TEST,	AMMER BUTTCHER 1, 51.	38: AND 44		TO OPERATE DURING T	*	
SYSTEM EFFECT-OPERATION	SYSTEM EFFECT-OPERATION DOES NOT START. PAILURE OF SHITCHES TO OPERATE PREVENTS SUBROUTINES STARTING.	HES TO OPERATE PREVENT	BUSROUTI	HER RIART	. ¥.		
VEHICLE EFFECT-COMPOSITE RESCHEDULED.	ITE REBCHEDULED.						
	STATE OF THE PARTY AND STREET AND STREET BARTONES.	IN STINGSHOO CAN WITH	3 41.451 ×	40 M 94 94			

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	DIFFICULTER REVIEW-AUTOFILOT BYRTCM-AIRBORNE	WILLOT BYSTEM-AIRBOR	ž			ſ
SVSTEN SUB-SVSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE SATE DIF TIME DIF	I W O T I	VENDOR NAME	
AUTOPILOT-RCUMD-A/B PROGRAMMER	24-7-436/PC-2CO-01A-13 RE313TOR	COMPOST TE-PACTORY	158 FACTORY 580%18	22	7-41011	
FAILURE MODE-FAIL DURIN BIOR IN THE PROGRAMMER O	HEING OPERATION-PITCH PROGRAM GUTPUT WAS SO PCT LOW THROUGHOUT THE TEST DUE	S SO PCT LOW THROUGH	OUT THE TEST DUE		TO A FAULTY BOX REST	
STSTEM EFFECT-MOME. BY	STRIEN MAS ACCEPTED AS IS SINCE ONLY A GUALITATIVE CHECK OF PI.CH PROGRAM MAS PERUIRED	SUALITATIVE CHECK O	P PI CH PROGRAM	# # PE	UIRED.	
WENTCLE EFFECT-NONE (REF	DEF. ENCINEERING MEND SA-547-8-29).		,			
CORPECTIVE ACTION-UNKNOWN.	Out.					 :
AUTOPILOT-ROMD-A/B FROGRAMER	EC-7-095/P4-102-00-13 VERNIEP EMGINE FEEDBACK TRANSDUCER	PLIGHT	13A 14 502207 96.8	ž Š		*02504
FAILURE MODE-SMORT, IT E MEAT CAUSING A DECREAS STABILITY.	FAILURE MODE-SHORT, IT IS CONCLUDED THAT ONE OF THE VERHIER ENKINE FEEDBACK TRANSDUCENS SHORTED OUT DUE TO EXCESSIV E HEAT CAUSING A DECREASE IN AUTOPILOT PTEDBACK EXCITATION. THIS RESULTED IN A GAIN CHANCE WHICH CAUSED AUTOPILOT IN STABILITY.	ENGINE PEEDBACK TR THIS RESULTED IN A	Chisducers shortes Gain Chamge Which	0 001 E	LE TO EXCESSIVE AUTOPILOT IN	
SYSTEM EFFECT-INPROPER ANALOG SIGNE POSITION TRACES, FOLLOWED BY DING AGAINST THEIR MECHANICAL STOPS,	SYSTEM EFFECT-INPROPER ANALOG SIGNALS. AT 108.4 SECONDS AFTER LIFTOFF A DEFINITE DISCONTINUTY WAS INDICATED BY ENGI E POSITION TRACES, FOLLOMED BY DIVERGENY OBCILLATIONS IN ALL THREE PLAMES. BY 110.9 SECONDS ALL EMGINES WENE LIMITI G AGAINST THEIR MECHANICAL STOPS.	ER LIFTOFF A DEFINI L THREE FLANES. BY	TE DISCONTINUTY I	45 170 . EME11	ICATED BY ENGI ES NERE LIMITI	·
WENIEUE EFFECT-LOSS OF	OF VEHICLE STABILITY. MISSILE BREAKUP OCCURAED AT 156 SECONDS.	CCURAED AT 156 SECO	ðs.			
CORRECTIVE ACTION-COMPL DWACK TRANSDUCER SOLDERE ROUGH CONDUIT, ALL YERNI ON LEADS TO THE TWO WERN	CORRECTIVE ACTION-COMPLETE SEAL AT FORMARD PORTION OF FAIRING, ALUMINUM BHIELD TO COVER END OF VERNIER FAIRING, FEE DANCK TRANSDUCER SOLDERED PLUG REPLACED WITH PERNAHEHT SPLICE, TRANSDUCER WIRING SLEEVED IN FIBERGLASS AND ROUTED TH ROUGH CONDUIT, ALL VERNIER ENGINE AREA WIRING WARPING IN ALUMINUM FOIL, RICHROME MILL REPLACE WIRING ON TWO EXCITATION LEADS TO THE TWO VERHIER ENGINE FEERDACK TRANSDUCERS. (REPORT 2C-7-094).	LIRING, ALUMINUM BHIELD LICE, TRANSDUCER WIRIN ALUMINUM FOIL, NEO-MON (REPORT ZC-T-096),	TO COVER END OF C. SLEEVED IN FIBI E. WILL REPLACE W	VERNIE PRELANGE	R FAIRING, FEE AND ROUTED THE N TWO EXCITATI	
autopilot-rond-a/b Programer	EM-769/1A, 116-8F3-DZA FLIGHI CONTROL PROGRAMER	CAPTIVE	EA EDMARDS 571031 130-10		YES 60/C	4.0317
FAILURE MODE-FAILED TO	TO OPERATE AT PRESCRIBED TIME, FAILED TO INITIATE BOOWTER CUTOFF.	O INITIATE BOOKTER	curoff.			
SYSTEM EFFECT-INFROPER	PER DISCRETE SIGNALS.		,			
WEHICLE EFFECT-LATE BOO	BOOSTER ENGINE CUTOFF.					
CORRECTIVE ACTION-NONE,	, BACKUP CUTOFF DISCRETE SUPPLIED BY ENGINE TIMER.	CHAINE TIMER.				
AUTOFILOT-ROUND-A/B PROGRAMMER	EM-797/1 A.115-8P4 AUTOFILOT PROGRAMMER	24114C	EA COMMOS STIGET 1A 1ET	Y G	5/09	
FAILURE HODE-FAIL TO OF RIME BODETER OPERATION.	FAILURE HODE-FAIL TO GPERATE AT PRESCRIBED TINE. THE PROGRAMMER FAILED TO INITIATE CUTOFF AT THE PRESCRIBED TINE DU The booster operation.	MAKER PAILED TO INIT	LATE CUTOFF AT TO	5	CRIBED TIME DU	
					PAGE 0033	·
	AMERICAN CONTRACTOR OF SALESCENING AND ARREST AND SALESCENING	termination of the second seco	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT		and the second second second second	•

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STATEN BUB-STATEN	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE FART NUMBER	VEHICLE DATE DIF T	\$17E 1ME D1F	VEHICLE BITE PRI VENDOR MANE.	PART NO	
BYBIEM EFFECT-IMPROPER D	BYSTEM EFFECT-IMPROPER DISCRETE SISMALS. THE PROGRAMMEN FAILED TO SEND THE DISCRETE CUTOFF.	LED TO BEND THE DIP	CAETE CUTOF	·			25 77:40
WEHICLE EFFECT-LATE BODE D OUT.	WENICLE EFFECT-LATE BODETER EMBINE CUTOFF, THE BOOBTER OFENATION DID NOT CUTOFF UNTIL THE BACK-UF EMBINE TIMER TIME Out.	ATION DIB NOT CUTOF	7 UNTIL THE	BACK-UP	ENGINE 73	ACR TIME	
CORRECTIVE ACTION-NOME.							
AUTOFILOT-ROUND-A/B PROGRAMMER	EN-435/106.0-4	CAPTIVE	3A 8	:	YES NO		956979
PAILURE MODE-OUT OF SPEC	FAILURE MODE-OUT OF SPECIFICATION. THE PROSNAMER OUTPUT BIGNAL MAS APPROXIMATELY 75 PCT OF EXPECTED OUTPUT.	CHAL MAS APPROXIMAT	ELY 78 PCT	OF EXPEC	TED OUTPUT.		
STATEM EFFECT-MONE.							
VEHICLE EFFECT-HONE.							
CORRECTIVE ACTION-UNKNOWN.							
AUTOFILOT-ROUND-A/B PROGRAMER	CT-99-D4-253 BINARY ASSEMBLY	FAR 27-41498-1	920058		YES 60/C NO		98G471
FAILURE MODE-STRUCTUR'L.	FAILURE MODE-STRUCTURIL, INTERCOMECTIMS LEADS WERE REVERSED.	ė					
CORRECTIVE ACTION-RECOMM	CORRECTIVE ACTION-MECOMMEND CAUTION TO COGNIZAMT FACTORY PERSONNEL TO ASSURE LEAUS ARE PROPERLY CONVECTED.	RSCHNEL TO ASSURE L	ZAUS ARE PR	OPERLY C	OWNECTED.		
AUTOFILOT-ROUND-A/B GYNO PACKAGE	83-ANC-02-66 64RO, 34RD	CONFOST TE-FR0/DPL	6.00 0.505.00 0.505.00	22	7ES 60/C		3 0 1969
FAILURE MODE-OUT OF SPEC	FAILURE MOE-OUT OF SPECIFICATION. RED LIGHT INDICATION ON THE LAWCH ANALYST PANEL THAT SHED WAS NO-60.	THE LAWICH AMALYBY	PANEL THAT	SHALD WAS	6		
SYSTEM EFFECT-CPERATION TOO LOW.	700 LOM.						
VEHICLE EFFECT-COMPOSITE DELAYED.	DELAYED.						40 40
CORRECTIVE ACTION-6YBO CAN REPLACED.	AN REMLACED.		enteres establishment establishment				
AUTOFILOT-FOUND-1/8 67RO PACKAČE	B3-4MO-D1-66 PITCH DISPLACEMENT 6YRO	COMPOSITE-FRD/DPL	6.0581 6.50581	2	46.9		
FAILURE MODE-OUT OF SPEC	FAILURE HODE-OUT OF SPECIFICATION. WINGAL TEST FAIL RED LIGHT DURING LOOP FEST ON LAUNCH ANALYST PANEL.	HT DURING LOOP TEST	OK LAUNCH	AMALYST	PANEL.		
SYSTEM CPFECT-IMPROPER A	STETEN EFFECT-IMPROPER ANALOG SIGNALS DUE TO IMPROPER STRO GAIN.	GAIN.					

15 JUN 1968

DIFFICULTIES REVIEW-AUTOFILOT BYBTEM-AIRBORME

SYSTEM SUG-SYSTEM	*	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF		# 5 # 5	SITE PRI VENDOR NAME	
VEHICLE EFFECT-COMPDOM ABORTED.	COUNTDOM	ABCM TED.						1003241
CORRECTIVE ACTION-	ON-REPLACE	REPLACED STRO CAN.						
AUTOPILOT-ROUND-A/B	•	GD/CBRF43-027 GYRO-DISPLACEMENT	COUNTDOINN E7-75041-001	1500	ī	ž č		0,5
FAILURE MODE-FAIL		DURING OPERATION.						
SYSTEM EFFECT-1	HPROPER AN	STSTEN EFFECT-THPROPER ANALOG SIGNALS FAULTY PITCH GTRO.						
WEHICLE EFFECT-COUNTDOWN ABORTED.	COUNTDOM	ABOR TED.						
CORRECTIVE ACTION-UNKNOWN.	CN-CHENON	7.2						
AUTOFILOT-ROMD-A/B	•	4D/CBAF45-0£7	COUNTDOWN E7-75041-001	1 500 63040£	ä	¥ 5		***
FAILURE HODE-OUT	IT OF SPEC.	FAILURE HODE-OUT OF SPECIFICATION. AN AUTOPILOT GYRO MAS NOT RUNNING AT PROPER SPEED AND A SMRD FAULT SIGNAL WAS RE ELIVED ON THE LAP.	OT RUNNING AT PROPE	R SPEED AN	D A SURED	FAULT	SIGNAL WAS RE	
SYSTEM EFFECT-1	HPROPER AL	SYSTEM EFFECT-IMPROPER AMALOG SIGNALS RESULTED IN A NO-GO LOOP TEST.	.coe 1E37.					
WENICLE EFFECT-COUNTDOWN DELAYED.	COUNTDOM	DELAYED.						
CORRECTIVE ACTI	OH-REPLACE	CORRECTIVE ACTION-REPLACED GTRO CANISTER.						
AUTOPILOT-FCUND-A/B	ę	A-89-04-4317F PITCH DISPLACEMENT GYRO	FAR 7-41015-967	1720	PACTORY	ž 4	YES REARFOTT HO	990796
FAILURE MOUS-CO UENT TESTING REV MNING BELOW SYNC	CE SPECTOLENE THAT HACK DUS SE	FAILURE MOLE-USS OF SPECIFICATION, GYRO PACLAGE FAILED AT THE GOZC BUPPORT DEPOT WHEN IT HAD NO SHED OUTPUT. UENT TESTING REVEALED THAT THE PITCH DISPLACEMENT GYRO (REARFOTT SZN 3828ABEG, GOZC PZN 7-DAR3G-3) SPIN-NOTOR NNING BELOW SYNCHRONDUS SPEED DUE TO EXCESSIVE FRICTION IN THE SPIN-NOTOR BEARING.	THE GO/C SUPPORT DE TPOTT S/N 39294BE6+ THE SPIN-MOTOR BEAR	POT WHEN I 60/C P/N 1HG.	1 HAD NO 7-04250-3	2000	CUTPUT. SUBSEA N-MOTOR WAS RU	
CCARECTIVE ACTION-KEARFOY DESIGNATED IN GIROS WITH	ON-KEARFO	CCRRECTIVE ACTION-KEARFOYT IHITIATED USING BEITER LUBRICANT FOR NOTOR BEARINGS. THE BEARINGS WITH NEW LUBRICANT NOW DESIGNATED IN GTROS WITH VENDOR BERIAL MANBERS CONTAINING THE LETTER C.	FOR NOTOR BEARING	S. THE BEA	TINGS WIT	ğ	FUBRICANT NOW	
AUTOFILOT-ROMD-A/B	9/1	A-JA-04-4562-F BARD TRANSIBTOR A-1	FAR 27-49106-3	1720	FACTORY	ž 3		
FAILURE MODE-FAIL FAILURE OF THE AU MIGHET THAN MORPAL	AUTOPILO	FAILURE MODE-FAIL DURING OPERATION, THERE MAS A MO-GO CUTPUT FROM THE RPIN-MOTOR ROTATION-DETECTOR (SMRD) INDICATIN 6 FAILURE OF THE AUTOPILOT GYROSCOPE CANISTER, AMALYSES INDICATED THAT SMRD SUBASSENSET E MAD A LOW CUTPUT CAUSED ST - MISMER-THAN NORMALLEGARAGE-CURRENT PROM BASE TO COLLECTOR OF TRANSISTOR 4-1.	LI FACH THE BEIN-MO CLIED THAT SHED BU W THANSIBTON &-E.	BASSENBLY	2 HAD A L	# 75 75	MED INDICATIN	
							PAGE 0035	
Continued of the Contin	AND REPORTED THE PROPERTY OF THE PERSON NAMED IN	physics, accompany of the house of the particular of the particula	AND ASSESSMENT OF THE PROPERTY					

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		DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBURNE	TOPILOT SYSTEM-AIRBUR	7				r
L	SUS-SYSTEM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	\$17E	ATO ATO	SITE PRI VENDOR MANE	
1	CORRECTIVE ACTION-NOME.	THIS EXACT CAUSE OF THE EXCESSIVE LEARAGE CURRENT COULD NOT BE LEARNED.	LEARAGE CURRENT COUL	D NOT BE L	EARNED.			***************************************
1 2 5	AUTOFILOT-ROMD-A/B GYRO PACKAGE		FAR 27-44534-801	631031	FACTORY	753 60/0	٧,	1
I	FAILURE MODE-OUT OF TOLL NE SMRD OUTPUT FROM THE ITMIS WAS CAUSED BY DENA!	FAILURE MODE-OUT OF TOLERANCE, GYROSCOPE PACKAGE WAS REJECTED FOR A SHRD NO-GO INDICATION, FAILURE ANALYSIS FOUND T HE SHRD OUTPUT FROM THE PITCH DISPLACEMENT GYRO (P/N 7-D425G-803) AND THE ROLL-RATE GYRO (P/N 27-D4574-3) TO BE LOW. THIS WAS CAUSED BY DEMAGNETIZATION RESULTING FROM EXTRANEOUS YOLTAGE TRANSIENTS.	TED FOR A SHRD NO-GO (G-803) AND THE ROLL- NJS VOLTAGE TRANSIENT	INDICATIO	N. FAILUS	IE AMAL 14574-3	TAIS FOUND T	
	CORRECTIVE ACTION-NOME.	EXACT CAUSE OF EXTRANEOUS VOLTAGE NOT FOUND.	HOT FOUND.					
75	AUTOFILOT-ROUND-A/B	A-89-04-4460-F CAPACITOR GROUP	FAR 7-41909-3	4300SB	FACTORY	4 C &		22.4.80
z W	FAILURE MODE-OPEN (ELEC' MIMALS 3 TO 4 AND 5 TO B E WIRING AND TERMINALS M	FAILURE MODE-OFEN (ELECT.), THE CAPACITOR GROUP WAS 187D WHEN DURING A POST ENCAPSULATION 1EST, IT MAS REPORTED TER ITMALS 3 TO 4 AND 5 TO 8 INDICATED OPEN. THE REPORTED FAILURE WAS CONFIRMED. THE CAUSE COULD HOT BE DETERMINED AS TH : WIRING AND TERMINALS MERE DAMAGED DURING DEPOTTING.	HEN DURING A POST EN RE WAS CONFIRMED. TH	CAPSULATIO E CAUSE CO	N TEST, 1	# 50 55 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	REPORTED TER RMINED AS TH	
	CORRECTIVE ACTION-FACTOR	CORRECTIVE ACTION-FACTORY AND INSPECTION PERSONNEL WERE INFORMED OF THIS FAILUKE ANALYSIS. NO FURTHER ACTION TAKEN.	FORKED OF THIS FAILU	KE ANALYSI	8. NO FUE	THER A	CTION TAKEM.	
₹5	AUTOFILCT-ROUND-A/B STRO PACKAGE	A-JA-04-4504-F TORQUE AMPLIFIER	FAR 7-41724-9	630919	FACTORY	ž č		•
- 10	FAILURE MODE-OUT OF SPEC IGM OUIPUT, SUBSEQUENT TI PUT, THE USCILLATIONS WEN ON OF THE COMPOMENTS, TH	FAILURE HODE-OUT OF SPECIFICATION. THE TORQUE AMPLIFIER REPORTEDLY FAILED AT GO/C PRODUCT SUPPORT CENTER DUE TO A H IGH DUIPUT. SUBSEQUENT TESTING REVEALED THAT AN OBCILLATION SIGNAL RIDING THE OUTPUT SIGNAL CAUSED THE EXCESSIVE OUT PUT. THE OSCILLATIONS WERE ISOLATED TO THE AMPLIFIERS FEEDBACK CIRCUIT, HOMEWER: DEPOTTING RESULTED IN THE DESTRUCTS ON OF THE COMPONENTS, THIS PREVENTED THE CAUSE OF FAILURE FROM BEING IDENTIFIED.	PCRIEDLY FAILED AT 6 1 SIGNAL RIDING THE O 1ACK CIRCUIT, HOMEYER 1ROM BEING IDENTIFIED	DZC PRODUC UTPUT SIGH , DEPOTTIN	T SUPPONT AL CAUSE F RESULTS	CENTE THE E	R DUE TO A H KCESSIVE OUT HE DESTRUCTE	
	CORRECTIVE ACTION-NO CON	CORRECTIVE ACTION-NO CORRECTIVE ACTION COULD BE TAKEN SINCE THE CAUSE OF THE FAILURE WAS NOT FOUND.	E THE CAUSE OF THE F	ATLURE MAS	NOT FOUR	Ġ		
35	AUTOFILOT-ROUND-A/B GTRO FACKACE	A-JA-04-4108-F TORQUE AMPLIFIER	FAR 7-41784-9	630916	FACTORY	ž Q		
4 A	FAILURE MODE- OUT OF SPE 18 FOLID TO HAVE HO OHIFF IMED, HOMEVER, SINCE BOM	FAILURE MODE- OUT OF SPECIFICATION. THE TORGUE AMPLIFIER REPORTEDLY FAILED AT GD/C PRODUCT SUPPORT CENTER MEN IT M AS FOLID TO HAVE HO CHIPUT, THE FAILURE WAS CONFIRMED DURING BUBSEQUENT TESTING. THE CAUSE OF FAILURE WAS NOT DETERM IMED, HOMEVER, SIMTE SOME OF THE INTERNAL COMPONENTS MERE INADVENTENTLY DESTROYED DURING DEPOTTING.	ieportedly failed at 16 aubsequent testing 18 aubvertently deatroy	COZC PRODU THE CAUS	CT SUPPORTED TO STATE OF PAIN	THE CENT	ER DEN IT W & NOT DETERM	
	·						PAGE DOSE	

GENERAL DYMMICS CONVAIR BIYISION

18 Jun 1996

TON-NOWE. AND SHOPE TRANSISTOR TAYLOR OWNERS TO THE THREE STATES THREE STATES TO THE STATES THREE STATES TO THE STATES THREE STATES TO THE TRANSISTOR OF THE TRANSISTOR COLD ONLY HAVE BEEN CALAGED BY EXTRINEOUS VOLTAGE AND WITHOUT SUCCESS. TON-NO COMPECTIVE ACTION TAKEN AS SOURCE OF VOLTAGE WAS NOT FOUND. AND CT-99-04-055 BATE STRO SHOP THE TRANSISTOR COLD ONLY HAVE BEEN CALAGED BY EXTRINEOUS VOLTAGE AND HAD COLD THREE THREE STRONG THREE ST	STATCH	TEST/REPORT NUMBER	DIF DATA BOUNCE	VEHICLE SITE	PRI VENDOR MAIN	
SE-SE-DA-4423-F SE-SE-DA-4423-F SECOND SIGNATION FINAL BROOT, SEED CIRCUIT BOARD HAD BRO CUTPUT OR CHARGEL-1. TRANSISTOR 8-1 HAS FOUND PRATIALLY BROOT TO THE TRANSISTOR COLOR OF HAN BEEN CLUMED BY EXTRANGOUS VOLTAGE AND FOUND. CT THE TRANSISTOR COLOR ORTH HAN BEEN CLUMED BY EXTRANGOUS VOLTAGE APPLIED TO THE INSTITUT OF SAGE TO THE SECOND SHAPE APPLIED TO THE INSTITUT OF SAGE TO THE SECOND SHAPE APPLIED TO THE INSTITUT OF SAGE TO THE SHAPE APPLIED TO THE INSTITUT OF SAGE TO THE SHAPE APPLIED TO THE INSTITUT OF SAGE TO THE SHAPE APPLIED TO THE INSTITUT OF SAGE TO THE SHAPE APPLIED TO THE	, E	PAILED CONFORM NAME	PART HUNGER	71ME 01F	OTH WENDOR PART NO	
SHEAD-HAMBISTON ET-4556-1 THICAL SHOOT TAKEN SED CHECKLY BOARD HAD BO CUTPUT ON CHANNEL-1. TRANSISTON 8-1 MAS FOLIOD TO THE INPUT OF SAGONT TO DISCOURS SOURCE OF EXTRANGOUS VC.TAGE MAS MITHOUT SUCCESS. THE THANSISTON COALD ONLY HAVY BEEN CLUED BY EXTRANGOUS VC.TAGES APPLIED TO THE INPUT OF SAGONT TO DISCOURS SOURCE OF EXTRANGOUS VC.TAGE MAS MITHOUT SUCCESS. THE OFFICE OF SAGONT SOURCE OF EXTRANGOUS VC.TAGE MAS MITHOUT SUCCESS. THE OFFICE STON SHOOT TAKEN AS SOURCE OF VC.TAGE MAS MOT FOUND. THE OFFICE STON SHOOT TAKEN AS SOURCE OF VC.TAGE TO THE SHOO CUTPUT THE STROSCOPE HAD NOTICE STON SHOOT TESTS SOURCE TO THE SHOO CUTPUT PINS. THIS WAS MOMETIZED BY INDURENTED THE STROSCOPE HAD NOTICE STON SHOOT TO THE SHOOT STAN SHOOT STON STAN SHOOT TO THE SHOOT STAN SHOOT THE STROSCOPE HAD NOTICE OF FALLURE UNKNETHED STAN SHOOT TO THE SHOO CUTPUT FINS. THIS WAS MOMETIZED BY INDURENTED TO THE SHOO CUTPUT FINS. THIS WAS MOMETIZED BY INDURENTED TO THE SHOOD TO MAY AN OFFIN WE ASSENDED TO THE SHOOT TESTS STAN SHOOT TO THE SHOOT THE STANDARD MASKING TECHNIQUES. THE DISPLACEMENT GYPO WAS TANDED TO THE SHOOT THE STANDARD BY AND AND AND AND AND AND AND AND STANDARD MASKING TECHNIQUES. A ***SHOOT MOM USING STANDARD MASKING TECHNIQUES. THE DISPLACEMENT GYPO WAS TANDED TO TO THE CAUSE OF THE CAUSE O	71:0H-HOM.					
THE ELANGET. WHO CIRCUIT DOARD HAD NO CUTTOT ON CANMELL. TRANSISTOR 6-1 WAS FOUND THE STRANSCOOL ONLY HAVE BEEN CAUMED BY EXTRANSCOOL WALARES APPLIED TO THE SHATTALLY SHE OF THE TRANSISTOR COALD ONLY HAVE BEEN CAUMED BY EXTRANSCOOL WALARES APPLIED TO THE SHATTOR OF SHATTALLY SHE OF THE SHATTOR OF THE SHAT	6 4 7	8F-96-04-44E3-F 8MED-TRANSISTOR	FAR 27-43563-1	FACTORY	7.68 63	201
CT-89-04-095 FAR 650902 FACTORY YES GOC MATE GIRO SHOD CT-89-04-095 FAR 650902 FACTORY YES GOC MATE GIRO SHOD CT-89-04-095 FAR 650902 FACTORY YES GOC MATE GIRO SHOD CT TOLERANCE. THIS BATE GYROSCOPE REPORTEDLY FAILED WHEN IT HAD LOM SHOD CUTPUT. THE GYROSCOPE HAD ROTATION DETECTOR COTPUT. TESTS INDICATED A DEMANDERIZED SHIM HOTOR ROTATION DETECTOR MACHET. THE MASSETIZED BY IMMONRIENT APPLICATION OF VOLTAGE TO THE SHOD CUTPUT PINS. THIS WAS HOREVELL GYRO. A A-90-04-4417 FAR 630902 FACTORY YES KEARFOIT FAR 630904 FACTORY YES KEARFOIT FAILURE. UNIT WAS RETURNED TO VELVOR WHERE DISASSENLY SHOUED PINS 4 AND 9 INTERCHANGED. IT WAS NOPTINIED NOS. 4 AND 9 MENE ALHORY IDENTICAL IN APPEARANCE. A 490-04-4418-F DISPLACEMENT GYRO T-04850-403 630830 HO T-04850-403 FACTORY YES KEARFOIT FARE DISPLACEMENT GYRO WAS IR/O FOR EXCESSIVE DRIFT WAS CAUSED DY MASS UMBALANCE B. THE DISPLACEMENT GYRO WAS IR/O FOR EXCESSIVE DRIFT WAS CAUSED DY MASS UMBALANCE B. THE DISPLACEMENT GYRO WAS IR/O FOR EXCESSIVE ON MASS UMBALANCE WAS NOT FOUND.	nechica Ition of 1 Ofton K	L BHORT, BHRD CIRCUIT BOARD HAD NO THE TRANSISTOR COLLD ONLY HAVE BEE D DISCOMER BOURCE OF EXTRANEGUS VO	OUTPUT ON CHANNEL-1. N CAUMED BY EXTRANEOUS LTAGE WAS MITHOUT SUCC	PRAMSISTOR 4-3 WAS VOLTANCE APPLIED T	POUND PARTIALLY SHE O THE INPUT OF SUB	
OF TOLERAME. THIS RATE STROSCOPE REPORTEDLY FAILED WEN IT HAD LOW SHED OUTPUT. THE STROSCOPE HAD MODATION DETECTOR DATES. THE STROSCOPE HAD MODATION DETECTOR MACHET. THE STROST	7104-40 C	DRECTIVE ACTION TAKEN AS BOUNCE OF CT-99-04-095 RATE GYNO SHID	F WOLTAGE 1468 NOT FOUN FAR 27-04574-3	30905 FACTORY	YES COC NO JESTOSAE	***************************************
A-99-04-4417F DISPLACEMENT STRO T-04250-803 DISPLACEMENT STRO T-04250-803 DISPLACEMENT STRO NO T-04250-803 T-04250	OUT OF TOL TOR MOTATI S DEMACHE! TION-HOME.	LERANCE, THIS RATE GYROSCOPE REPORTION DETECTOR CUTPUT. TESTS INDICATION OF LIZED BY IMBUERTENT APPLICATION OF CAUSE OF FAILURE UNKNOWN.	TEDLY FAILED WEN IT H ED A DEMANETIZED SPIN F VOLTAGE TO THE SHED	ND LOM SHED CUTPUT. HOTOR ROTATION DET DUTPUT PINS. THIS M	THE EYROSCOPE HAD ECTOR MACHET. THE AS HONEYMELL GYRO.	
OFEN. THE DISPL. GYRO WAS IR/D WHEN 17 WAS FOUND TO MAVE AN OPEN HEATER CIRCUIT. A CONTINUITY CHECK CO- PROTED FAILURE. UNIT WAS RETURNED TO VENDOR WHERE DISASSENDLY SHOWED PINS 4 AND 9 INTERCHANGED. IT WAS E HAMDFRINTED NOS. 4 AND 9 WERE ALMOST IDENTICAL. IN APPEARANCE. 110N-VENDOR NOW USING STANDARD MARKING TECHNIQUES. 120N-VENDOR NOW USING STANDARD MARKING TECHNIQUES. 197-0 PACTORY YES KEARFOTT 197-0 PACTORY YES KEARFOTT 197-0 PACTORY YES KEARFOTT 197-0 PACTORY YES MARKING 197-0 PACTORY YES MARKOTT 197-0 PACTORY YES M	-4.0	A-88-04-4417F DISPLACEMENT SYRO	FAR 7-04250-603	FACTORY	YES KEARFOTT	493387
T. THE DI	OPEN. THE PORTED FAI E HANDPRIN TION-VENDO	DISPL. GYRO WAS IR/D WHEN IT WAS : KLUKE. UNIT WAS RETURNED TO VENDOR KTED MOS. 4 AND 9 MERE ALMOST IDEN WE MOW HAIMS STANDARD MARKING TECH	FOUND TO HAVE AN OPEN WHERE DISASSENDLY SHOTICAL IN APPEARANCE.	HEATER CIRCUIT. A C MED PINS 4 AND 9 IN	ONTIMUITY CHECK CO	
DRIFT. THE DISPLACEMENT GYRO WAS IR/D FOR EXCESSIVE DRIFT. EXCESSIVE DRIFT WAS CAUSED BY MASS UNDALANG Of "8.02 Degrees/Mour. Tolerance is 8.0 deg/HR. The cause of mass undalance was not found.	0-A/B		FAR 7-04250-603		YES KEARFOTT NO	
	DRIFT. THE OF -8.08 D	: DISPLACEMENT GYRO MAS IR/D FOR E MEGREES/MOUR. TOLERANCE IS 8.0 DEG	XCESSIVE DRIFT. EXCESS /hr. the cause of Mass	IVE DRIFT WAS CAUSE UMBALANCE NAS NOT	O BY MARS UNBALANC FOUND.	

9991 WOF 91	DIFFICUATIES REVIEW-AUTOFILOT	WILOT BYSTEM-AIRBORNE	¥	-	-	٢
	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE	VENICLE BITE PRI	BITE PRI	I VENDOR PAST NO	
3.341E	THE EXACT CAUSE OF MASS UNBALANCE	WAS NOT FOUND, NO CO	CORRECTIVE ACTION CAN BE TAKEN.	TON CAH B	E TAKÉM.	*****
AUTOFILOT-ROUND-A/B GYRO PACRAGE	SP-99-DA-AAD3-P MAGMETIC AMPLIFIER CIRCUIT BOARD	FAP 60-07900-021	esoere FA	FACTORY YES	B HAGNETTC CONTR	******
FAILURE MODE-ELECTRICAL AND 12. WHILE DEPOTTING PINS 2.7.6, AND 13. (SEE	OPEN. THE TEMPERATURE CONTROL UMIT UMS IR/D FOR AN OPEN CIRCUIT BETHEEN PINS 8 AND 7, AND 7 THE UNIT IT WAS DISCOYERED THERE WAS NO SOLDER BETHEEN PIN 7 AND THE GROUND MIRE COMMON TO PHOTOS 188338 AND 188348).	UMS IN/D FCR AN OPE. IS NO SOLDER BETWEEN	4 CIRCUIT BE PIN 7 AND II	THEEN PIN	S & AND 7, AND MIRE COMMON TO	
CORRECTIVE ACTION-VENDOR	R INITIATED VISUAL INSPECTION AFTER FINAL ASSY. AND BEFORE POTTING.	FINAL ABSY. AND BEFO	DRE POTTING.			
AUTOPILOT-ROUND-A/B	A-A9-04-4208F AMPL FFER	FAR 7-41019-887	154D FA	FACTORY NO		3 2 2
FAILURE MODE-OUT OF TOLI MAS BELIEVED TO BE DUE: CORRECTIVE ACTION- TIGHT	TOLERANCE, LOW TAN GTRO SIGNAL AMPLIFIER OUTPUT FAILURE COULD NOT BE COMFIRMED IN GTRO. TROUBLE DUE TO TOLERANCE BUILDUP IN THE SYSTEM. TIGHTEN CONTROL OVER KNOWN BUILDUP OF TOLERANCES. PCRMISSION REQUESTED FROM CUSTOMER TO IMPROVE	IN OUTPUT PAILURE COI MERANCES. PERMISSICO	ALD HOT BE CO	NOT CUSTO	IN GYRO, TROUBLE	
STRICK IERRS. AUTOFILOT-ROUND-A/G. GYRO PACKAGE	A-99-04-4260 DISPLACEMENT GYRO SHRID	FAR 7-04250-3	630321 FAC	PACTORY YES	K KEARFOT?	***************************************
FAILURE NOBE-ELECTRICAL	RICAL OPEH. BYRO HID NO SHRID GUTPUT DUE TO AN OPEN BIRID MINDING CAUSED BY APPLICATION OF HIGH VOL	O AN OPEN AMED LEND!	ING CAUSED BY	. APPLICA	10t OF HIEH VO	and the second seco
CORRECTIVE ACTION-NOWE.	REASON FOR APPLICATION OF HIGH VOLTAGE WAS NOT LEARNED.	AGE WAS NOT LEARNED.	_			
AUTOFILOT-ROUND-A/B GYRO PACKAGE	A0463-0046/B3-401-00-10E 6780-018PLACENENT	F.16HT	1020 8-3 620309 0	763		
FAILURE MODE-FAILED TO CONTING VERY SLOWLY. THIS E-CAM-TEST IS TO DETECT !	FAILURE MODE-FAILED TO OPERATE AT PRESCRIBED TIME, THE PITCH DISPLACEMENT GYRO SPIN MOTOR WAS NOT ROTATING OR WAS R Tating very elomey, this combition appears to have existed during the filt-the-can-test, the purpose of the Tilt-th :-can-test is to detect hom rotating stros.	THE PITCH DISPLACEMENT GYRO SPIN MOTON WAS NOT ROT Exibted During the Tilt-The-Can-Tebt, the Pumpose	SPIN HOTOR V	AS NOT RO	DTATING OR WAS R	والمسترج والمراجع والمسترود
PROPER A	BYBIEN EFFECT-INFROPER ANALOG BIGNALB. TORBUING OF THE PITCH DIBPLACEMENT BYRO DURING THE PITCH PROGRAM REBULTED IN Encebbive fitch bignalb to the engines.	H DISPLACEMENT STRO	DURING THE F	1 TCH 780	RAN RESULTED E	·
VEHICLE EFFECT-IMPROPER XIMATELY 38.8 AECONDS.	VEMICLE EFFECT-INPROPER TRAJECTORY. HISSILE BELF-DESTRUCTION, CAUSED SY THE EXCESSIVE PITCH RATE, OCCURRED AT APPRO-	M, CAUSED BY THE EXC	ESSIVE PITCH	RATE, OC	CURRED AT APPR	
		,			PAGE OGSE	

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SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	E T O	VENDOR MANE VENDOR PART NO	
CORRECTIVE ACTION-SPIN	CORRECTIVE ACTION-SPIN MOTOR ROTATION DETECTOR AND IMPROVEMENT (SUFFIX D) IN GYRO DESIGN HAD PREVI- ENDED BY GOC BUT OLD TYPE GYROS (SUFFIX B) WERE PLOMN. SUBSEQUENT VEHICLES TO CARRY IMPROVED GYROS.	AND IMPROVEMENT (SUFFIX D) IN (FLOMM, SUBSEQUENT VEHICLES TO	IN GYRO DESIGN HAD PREVIOUSLY BEEN RECOMM TO CARRY IMPROVED GYROS.	MEVIOUSLY B	EEN RECOM	
AUTOFILOT-ROUD-A/B STRO PACKAGE	A-49-04-4129-F RATE 67RO	FAR 7-41014	177D FACTORY 630220	17 76.5		90776
FAILURE WODE-OUT OF TOLERAN ISM PITCH-RATE STRO TORSUIM CE GIVING A HISM READING.	FAILURE WODE-OUT OF TOLERANCE, GYRO CANISTER REPORTEDLY FAILED IN THE FACTORY FINAL TEST AREA WHEN IT EXHIBITED A H EM PITCH-RATE GYRO TORGUING GAINS, FAILURE INDICATIONS BELIEVED CAUSED BY A BUILDUP OF PACKAGE AND TEST SET TOLERAN E GIVING A HIGH READING.	ILED IN THE FACTORY LEVED CAUSED BY A BE	FINAL TEST AREA ILLDUP OF PACKAG	WHEN IT EXH I AND TEST B	IBITED A H ET TOLERAN	
CORRECTIVE ACTION-FAILURE PARAMETERS BUILDUP OF TOLERANCES.	URE NOT CONFIRMED. HOMEVER, A LETTER WAS SENT TO THE AIRFORCE REQUESTING PERMISSION TO EXPAND TERS TO A POINT COMPARABLE WITH THE FIELD PARAMETERS. THIS CHANGE WOULD TAKE INTO ACCOUNT THE	I WAS SENT TO THE ASS PIELD PARAMETERS. TO	FORCE REQUESTIN	PERMISSION TAKE INTO A	TO EXPAND	
AUTOPILOT-ROUND-A/B GTRO PACKAGE	A-A3-D4-41E6-F D13M-ACEMENT GYRO	FAR 7-41015-967	1770 FACTORY 630220	T TES		
FAILURE MODE-OUT OF TO IGM PITCH DISPLACEMENT NG A HIGM READING.	FAILURE MODE-OUT OF TOLERANCE, GYRO CANISTER REPORTEDLY FAILED IN THE FACTORY FINAL TEST AREA WHEN IT EXHIBITED A H IGH PITCH DISPLACENENT GAIM. FAILURE INDICATIONS BELIEVED CAUSED BY A BUILDUP OF PACKAGE AND TEST SET TOLERANCE GIVI NG A HIGH READING.	LILED IN THE FACTORY LAUSED BY A BUILDUP O	FIML TEST AREA F PACKAGE AND T	WHEN IT EXH (ST SET TOLE)	IBITED A H RANCE GIVI	
CORRECTIVE ACTION-FAILURE ID THE SYSTEM TEST PARAMETERS. E BUILDUP OF TOLERANCES.	VOT CONFIRMED, HOMEVER, S TO A POINT COMPARABLE	A LETTER WAS SENT TO THE AIR FORCE REQUESTING PERNISSION TO EXPAN WITH THE FIELD PARAMETERS, THIS CHANGE WOULD TAKE INTO ACCOUNT TH	FORCE REQUESTI	WE PERMISSION TAKE INTO	N TO EXPANACCOUNT TH	
AUTOPILOT-ROUND-A/B GYRO FACKAGE	A-89-04-4212 Amplifier/Capacitor	FAR 7-41907-5	630219 FACTORY	Y YES		092743
FAILURE MODE-OUT OF TO ITOR CT. CASE OF CAPACI DIATELY AFTER POTTING.	FAILURE MODE-OUT OF TOLERANCE. PHASE SHIFT OF ROLL SIGNAL AMPLIFIER WAS OUT OF SPEC DUE TO CHANGE IN VALUE OF CAPACITOR CASE OF CAPACITOR WAS FOUND DENTED. AMPLIFIER WAS IN SPEC IMMEDIATELY PRIOR TO POTTING AND OUT OF SPEC IMMEDIATELY AFTER POTTING. CAUSE OF FAILURE OF CAPACITOR WAS NOT LEARNED.	AMPLIFIER WAS OUT OF IN SPEC IMEDIATELY OF LEARNED.	SPEC DUE TO CH	INGE IN VALUE AND OUT OF	E OF CAPAC	
CORRECTIVE ACTION-CAUSE OF	FAILURE HAS NOT DETERMINED.	NO CORRECTIVE ACTION TAKEN.	KER.			
AUTOPILOT-ROMD-A/B	A-90-G4-4093-F FYRO DISPLACEMENT-COMMECTOR ELECT. 7-41015-967	FAR . 7-41015-967	430206 VIR	YES KEARFOTT NO	F011	4
FAILURE MODE-ELECTRICAL BHO TED TO PIN Y OF MATING PLUG.	FAILURE MODE-ELECTRICAL SHORT, ROLL GYRO COULD NOT BE MULLED, FAILURE WAS CONFIRMED DUE TO SENT PIN 2 OF J-164 SHOR ED TO PIN Y OF HATING PLUE.	ED. PAILURE MAS COM	TRMED DUE TO BE	4F FIN 2 OF	4-164 BHOR	

COMMETTING THIS DISCONDENDED NOTE TO INDIRECT ALL PLUS CONNECTIVE AND THE PRIOR PAIN OF THE PAIN			DIFFICULTIES REVIEW	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	N. M.C.				_
COMMECTIVE ACTION-GOOD INITIATED SPECIAL INSTRUCTIONS TO BITE TO INSPECT ALL PLUE FOR BENT FINE PRICE TO COMMECTIN AND PRICE. RANGE PRICE.	L	BTBTAN BUB-BYBTEN	TEAT/REPORT NUMBER FAILED COMPONENT NAME	DIF BATA BOUNCE			- I	VENDOR NAME ENDOR PART NO	
ANTORTION CHARLE WOLL-GREAT RESPONDENCEMENT FEAT 650122 WIR TES FAILURE WOLL-GREAT CEREO ANGAGE MAS RELECTED FOR NO SHOW OUTPUT. FAILURE MALLISTS REFEALED THE YAW 013 FAILURE WOLL-GREAT CEREO AND OFFEATING AT STRENGENCH AS STREET TO SHOW THE TELED OF SHARE A OF THE SPITH MOTOR WAS SURVEYED OFFE. CORRECTIVE ACTION AS NOT OFFEATING AT STRENGENCH STREET STR	1	CORRECTIVE ACTION-60/16 FAUGS IN ORDER	C INITIATED SPECIAL INSTRUCTIONS R TO ELIMINATE THIS TYPE OF HUMA	TO SITE TO INSPECT ALL.	PLUGS FOR BEN	7 P1H8 P	80 E	TO COMECTIN	N 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
TAILURE WODE-OFFN (DECT.). THE GYNO PACKAGE WAS RELICED FOR NO SHOO OUTPUT. PAILURE MANUSES REVEALED THE YAN DEA ON THE WIN MOT ON WAS NOT OFFENTING AT STRCHOOLD SPEED. CAUSE OF PAILURE WAS THE FEEL ELD OF PAILURE WAS NOT OFFENTING. AT STRCHOOLD SPEED. CAUSE OF PAILURE WAS THE FEEL ELD OF PAILURE AS OFFN THE WEIN MOT CORRECTIVE ACTION LAND INCORPORATED IN NEW GYNOS AND FRACTION INITIATED. A PROOFEN IMPROVED FLEXILLD OCCURE INITIATED OF CONTINUE SPECIAL MANUELLE INSTRUCTIONS TO BE INCOMPOSED. A PROOFEN IMPROVED FLEXILLD OCCURE INITIATE COSTS. SET PROD 59-5-50-50: WE PROOFED TO MANUEL WITHOUT WAS A WITHOUT WAS IN WITHOUT WAS A WITHOUT WAS INCOMPOSED AND WAS A WITHOUT CONDICTION OF COMPACE WAS A WINNESTIGATION OF WAS A WITHOUT WAS A WITH		AUTOFILOT-RUMD-A/B	NZ-8D-04-4071F 67RO-DISPLACEHENT	FAR 27-44534-5	630122 MT		50		
CORRECTIVE ACTION AS SPECIAL STUDY WAS MADE AND THE POLICITINE ACTION INITIATED. A FROM THANKE DESIGN WITH THE GO ON A CITCH AND INCOPERATED IN MEN GINGS AND REMEMBER. STROW WHILE PERIOD EXTENDED. A GING THANKING COURSE INITIATED TO BE CONTINUED SPECIAL MANDLING INSTRUCTIONS TO BE CONTINUED. ANT TO DE CONTINUED. SPECIAL MANDLING INSTRUCTIONS TO BE INCOPEDATED. AUTHOR TO BE CONTINUED. END TO BE CONTINUED. THE SPECIAL STRUCTURAL. STROWN THE STRUCTURAL. STROWN THE STRUCTURAL. THE THE STRUCTURAL STRUCTURAL. THE THE ACTION-WEBOOK IS ANAME OF CRACKED BLUE PRIGHEN AND IS COBUCTIVE AN INVESTIGATION ON OTHER GLUES AND CRACKED. CORRECTIVE ACTION-WEBOOK IS ANAME OF CRACKED BLUE PRIGHEN AND IS COBUCTIVE AN INVESTIGATION ON OTHER GLUES AND CRACKED. STRUCTURAL STRUCTURAL. THE TABLET STRUCTU		FAILURE MOE-OPEN (ELI PLACEMENT GYRO LAS NOT OR MAS BLRNED OPEN.	ECT.). THE GYRO PACKAGE WAS REJE OFERATING AT SYNCHRONOUS SPEED.	TED FOR NO SHED CUTFUT. CAUSE OF FAILURE MAS TH	FAILURE ANAL E FLEX LEAD O	TSIS REV K PHABE	אַ סע עבערנב	D THE YAW DIS THE SPIN MOT	
STATIONE MALL WORDERS INCRED TO HAVE A HIGH HALL WOLTAGE OUTPUT-A GROSS CHECK WITH RECEIV TAILUNG MOCHAGE HOOSE STRUCTURED. ROLL-AFTE GYRO WAS DISCOVERD TO HAVE A HIGH HALL WOLTAGE OUTPUT-A GROSS CHECK WITH RECEIV THE TAISECTIONS RECORDS PROCEDS A SHIFT OF IN-PHASE MALL WOLTAGE FROM E-64 TO 31.5 MV. FAILURE HAS CAUSED BY THE CAAC ALGO-THME THE STATOM WINDING TO HAVE A HIGH MALL WOLTAGE FROM E-64 TO 31.5 MV. FAILURE HAS CAUSED BY THE CAAC ALGO-THME THE STATOM WINDING TO HAVE A HIGH MOCHAGE HAS CONDICTIVE ACTION-WOODEN IN MEDICE HAS TEATHER HAS CAUSED BY THE CAAC COMPECTIVE ACTION-WOODEN INVESTIGATION CORRECTIVE ACTION WILL BE TAKEN. **ALLURE MODE-STRUCTURAL. PACKAGE HAS REJECTED IN MISSILE FINAL CHECKOUT FOR HO BAND OUTPUT. FAILURE WAS CAUSED BY F AALTY HELD JOHN'T HOUSE SY-STRUCTURAL BY CONTROL. INSURE USE OF FACTORY WELD SCHEDUALS AND VELDERS CERTIFICATION PROCAMM.		CORRECTIVE ACTION-A SHELL BE OBTATED AND INCOMED TO BE CONTINUED SHART FO 7-04250-80;	PECIAL STUDY HAS HADE AND THE POI OPPCRATED IN NEW GYROS AND RENORI PECIAL HANDLING INSTRUCTIONS TO I	LOMING ACTION INITIATED (8. GYRO WARN UP PERIOD 8E INCORPORATED IN APPRO	. A PROVEN IM EXTENDED. A 6 PRIATE EGP4.	PROVED PYRO TRAI	LEXE.	COURSE INITI	
FAILURE MODE-STRUCTURAL. ROLL-MATE GIRO WAS DISCORRED TO HAVE A HIGH WALL VOLTAGE COUPUT-A CROSS CHECK WITH RECEIVE TASSECTIONS RECORDS PHONED A SHIPT OF IN-PHASE MALL VOLTAGE FROM 2-64 TO 31.3 HV. FAILURE WAS CAUSED BY THE CAAC ALLOWING THE STATON WINDING TO HAVE A MINITE MOVEMENT SHIPTING THE IN-PHASE WALL. CORRECTIVE ACTION-VENDOR BY ANAME OF CARCIED GLUE PROBLEM AND IS CONDUCTIVE AN INVESTIGATION ON OTHER GLUES AND CENTAING ACCUTE. GOOD COMPLETION OF VENDORS INVESTIGATION CORRECTIVE ACTION WILL BE TAKEN. MAIGNELLOT-ROAD-A/B MAZ-04-4074 FAR BASE TO IN MISSILE FIMAL CHECKOUT FOR HO SHIPD OUTPUT. FAILURE WAS CAUSED BY FALLIVE MODE-STRUCTURAL. PACKAGE WAS REJECTED IN MISSILE FIMAL CHECKOUT FOR HO SHIPD OUTPUT. FAILURE WAS CAUSED BY FALLIVE ACTION-BULLITY CONTROL. INSURE USE OF FACTORY WELD SCHEDULES AND VELDERS CERTIFICATION PROGRAM. CORRECTIVE ACTION-BULLITY CONTROL. INSURE USE OF FACTORY WELD SCHEDULES AND VELDERS CERTIFICATION PROGRAM.	<u> </u>	AUTOPILOT-ROUND-A/B EVRO PACKARE	HG-99-04-4072F GYRO-PATE	FAR 27-41705-808			ž Q	OVETWELL	10 10 10 10 10 10 10 10 10 10 10 10 10 1
CORRECTIVE ACTION-VOIDO'N IS ANAME OF CRACKED GLUE PROBLEM AND IS CONDUCTING AN INVESTIGATION ON OTHER GLUES AND CEN ENTIME AGENTS. UPON COMPLETION OF VENORS INVESTIGATION CORRECTIVE ACTION WILL BE TAKEN. AUTOPILOT-ROUND-A/B NZ-AS-04-4074F FAR 830104 FACTORY YES FIND FACEAGE WAS DESTRUCTURAL. PACKAGE WAS REJECTED IN MISSILE FINAL CHECKOUT FOR NO SHED OUTPUT. FAILURE WAS CAUGED BY F AULTY WELD JOINT IN NOCULE EY-43183-3. CORRECTIVE ACTION-BUALITY CONTROL. INSURE USE OF FACTORY WELD SCHEDULE AND WELDERS CERTIFICATION PROGRAM.		FAILURE MOE-STRUCTUR ING THSPECTIONS RECORD NED GLUE ALLOHING THE:	AL. ROLL-RATE GYRO WAS DISCOVERED S SHOWED A SHIFT OF IN-PHASE NALI STATOR WINDING TO HAVE A MINUTE (D TO HAVE A HIGH WALL VO L VOLTAGE FROM 2.54 TO 3 HOVEMENT SHIFTING THE IN	LTAGE CUTPUT- 1.5 HV. FAILU- -PHASE MULL.	A CROSS	3874	K WITH RECEIV D BY THE CRAC	and the second s
AUTOFILOT-ROUND-A/B NZ-AB-04-4074F FAR 630104 FACTORY YES STAND FOR OUTPUT. FAILURE WAS CAUSED BY F "AILURE MODE-STRUCTURAL. PACKAGE WAS REJECTED IN MISSILE FINAL CHECKOUT FOR NO SHED OUTPUT. FAILURE WAS CAUSED BY F ALLTY WELD JOINT IN MOULE EY-43183-3. CORRECTIVE ACTION-BULLITY CONTROL. INSURE USE OF FACTORY WELD SCHEDUALS AND WELDERS CERTIFICATION PROGRAM.		CORRECTIVE ACTION-VEN	DOK 18 ANAKE OF CRACKED GLUE PRO WPLETION OF VENDORS INVESTIGATIO	ALEN AND IN CONDUCTING A CORRECTIVE ACTION WILL	H INVESTIGATI BE TAKEN.	5 5 5	Ş	GLUES AND CEN	
"AILUME MODE-STRUCTURAL. PACKAGE MAS REJECTED IN MISSILE FINAL CHECKOUT FOR MO SMED OUTPUT. FAILUME MAS CA AULTY MELD JOSMT IN MOGULE EV-43185-3. CORRECTIVE ACTION-SUALITY CONTROL. INSUME USE OF FACTORY MELD SCHEDUALS AND MELDERS CERTIFICATION PROGRAM.	1	SUTOPILOT-ROUND-A/B FTRO PACKAGE	NZ-A9-04-4074F 848D	FAR #1-44534-8			ž g		992190
CORRECTIVE ACTION-BUALITY CONTROL. INSURE USE OF FACTORY WELD SCHEDUALS AND WELDERS CERTIFICATION PROGRAM.		"ALLUNE MODE-STRUCTUR AULTY WELD JOINT IN MO	AL. PACXAGE WAS REJECTED IN MISS GIAE EY-43183-3.	ILE FIMAL CHECKOUT FOR N	o sesto currut	. **	3 y	A CAUSED BY F	
		CORRECTIVE ACTION-BUM	LITY CONTROL. INSURE USE OF FACT	CRY WELD SCHEDUALS AND W	ELDERS CERTIF	1577.0	8	AAK.	
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	18 JUN 1868	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBONNE	FILOT SYSTEM-AIRBORD				,,
i	8187EH 818-8787EH	FAILED COMPONENT NAKE	-DIF-DATA-SOURCE PART NUMBER	VEHICLE SITE		PRI VENDOR NAME-	er a papagori de la SEC è comme d'all'en
	AUTOPILOT-ROUND-A/B	A-99-04-4089-F AMPLIFIER WIRING	FAN 7-41808-805	2010 F	PACTORY YES		:
	FAILURE MODE-OPEN TERRINA SATA LEAD BETHEEN TERRINA	I (ELECT)-BISHAL AMPLIFIER EXHIBITED HO RATE EHITTER FOLLOMER OUTPUT, FAILURE COMFRMED DUE TO A I Terninal 4-8 and rebistor R-5. Lead Broke as a result of being pinched before or during Potting.	ENHIBITED HO RATE EMITTER FOLLOMER GUTPUT, FAILURE COMFIRMED DUE TO A R-5. LEAD BROKE AS A RESULT OF BEING PINCHED BEFORE OR DURING POTTING.	WIFUT, FAIL	LURE CONFIR	MED DUE TO A BR RING POTTING.	
	CORRECTIVE ACTION-60/C CONDUCTE FACTORY, ASSEMBLY PERSONNEL HERE DANAGE TO WIRES DURING ASSENDIY.	CORRECTIVE ACTION-60/C COMDUCTE, A CONPLETE REVIEW OF TOOLING AND METHODS USED BURING ASSEMBLY MATCH HAS FOUNDSATIS ACTORY, ASSEMBLY PERSONNEL HERE INFORMED OF THE HUMAN FAILURE AND WERE REQUESTED TO USE EXTREME CAUTION TO PREVENT ANAGE TO WIRES DURING ASSEMBLY.	NG AND METHODS USED RE AND MERE REQUESTE	DURING ABS	EMBLY MATCH	INS FOUNDSATIS	•
	AUTOPILOT-ROUND-A/B 6780 PACKAGE	FAR A-99-04-4104F 6YRO-RATE HEATER	FAR 7-04250-8	4 812129	FACTORY YES	KEARFOTT C702506000	007443
	FAILURE MODE-OUT OF TOLE	OF TOLDRANCE. RATE GYRO FAILED BECAUSE OF OVERHEATING DUE TO LOW RESISTANCE HEATER RING.	OVERHEATING DUE TO I	ON RESISTA	NCE HEATER	# # # # # # # # # # # # # # # # # # #	
	CORRECTIVE ACTION-NO CORRECTIVE ACTI	CCRRECTIVE ACTION-NO CORRECTIVE ACTION TAKEN. NO DISCREPANCIES FOLND IN GYRO, ACTUAL PAILURE OCCURED IN HEATER RING WAIGH WAS NOT SENT IN FOR AMALYSIS.	IES FOUND IN 67RO.	CTUAL PAIL	TBECOCCIBET	IN HEATER RING	
	AUTOPILOT-ROUND-AUB GYRO PACKAGE	A-93-U4-4078F AMPLIFIER-DC/TRANSISTOR	FAR 27-41358-803	Seleil F	FACTORY YES	,	::::
	FAILURE MODE-OUT OF TOLERANCE-TAD DC AMPLE ED OF BEING HEAT SENSITIVE, OWE ENGRA ON E T 125 DEG. THUS THE FAILURES HERE VERIFIED.	FAILURE MODE-OUT OF TOLERANCE-TWO DC AMMLFIERS ASSEMBLIES WERE REJECTED FOR BEING OUT OF TOLERANCE AND WERE SUSPECT ED OF BEING MEAT SENSITIVE, OWE ENGRA ON EACH ASSEMBLY WENT INTO THERMAL RUMMAY WHEN THE TRANSISTORS WERE TESTED A T 125 DEG. THUS THE FAILURES WERE WERFIED.	ERE REJECTED FOR BEI INTO THERMAL RUMMAN	NG OUT OF	TRANCE A	NO NERE SUSPECT	
	CORRECTIVE ACTION-BURVE) WERATURE BENBITIVITY, AL	CORRECTIVE ACTION-SURVET INSTRUCTION 7-63 NAS INITIATED. REQUIRING RETEST OF ALL 2NGOZA TRANSISTORS IN STOCK FOR TE Herrature schsitivity. Also test procedures here changed to require testing of DC amplificas for temperature sensiti	COURING RETEST OF AN	L ZNGOZA T	RANSISTORS RS FOR TEM	RETEST OF ALL ENGORA TRANSISTORS IN STOCK FOR TE TESTING OF DC AMPLIFICRS FOR TEMPERATURE SENSITI	
1	AUTOPILOT-ROAD-A/B	A-BH-04-4002-F RATE GYRO CANIGTER	FAR R7-45049-805	* 13112	SAPS YES		****
	PAILUME MODE-LEAK EXTER!	EXTERNAL-RENOTE RATE GYRO GROUP CANISTER LEAKED ARCUND PRESSURE FITTING WHEN REMOVED FROM STORAGE	LEAKED AROUND PRESS	AE F11114	WHEN REMOV	ED PROM STORAGE	
	CORRECTIVE ACTION-NOME, FAILURE NOT COMPIRMED.	PAILURE NOT CONFIRMED.					
						PAGE 0041	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE

STSTEN SUB-STSTEN	TEST/REPORT NUMBER FAILED COMPONENT MAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	\$17E	PRI YENDOR NAME OTH YENDOR PART NO	Ä	
AUTOPILOT-20MD-A/B GTRO PACKAGE	A-BD-04-4074F DIBPLACEMENT 6YRO HARMEBS	FAR 27-41002-655	. +20120	£ 5	7.68 68		12874
FAILURE MODE-DRIFT-THE PACK. 8 CAUSED BY FAULTY SOLDERING RTHER CHECKING FOUND THO MOR!	FAILURE MODE-DRIFT-THE PACKAGE WAS REJECTED WHEN DRIFTS FROM ALL 3 DISPLACEMENT GYROS CHANGED RADICALLY. FAILURE WA 8 CAUSED BY FAULTY SCLDERING OF WIRE TO COMMECTOR ASPY PIN 98. THIS IS CHASIS SROWND FOR GYRO DISPLACEMENT GROUP. FU RINER CHECKING FOUND TWO MORE LOOSE SOLDER JOINTS.	TON ALL B DISPLACEMEN 98. THIS IS CHASIS (IT GYROS CHI	INCED RAC FYRO DISA	MACEMENT GROU	# Z	
CORRECTIVE ACTION-ALL HARNESS AYS MAS PULLED BACK FROM GD/E.	CORRECTIVE ACTION-ALL HARNESS TRAYS REINSPECTED, NEW BOLDERING METHOD BEING INVESTIGATED, MANUFACTURE OF HARNESS TR TS MAS PULLED BACK FROM 60/E.	ERING METHOD BEING IN	IVESTICATED.	HANUFAC	TURE OF HARNE	5 E	
AUTOPILOT-ROUND-A/B GYRO PACKAGE	3F-9D-04-3350F RATE 67RO	FAR 27-41703-809	62 1000	ETA	YES MINNY-HONEY NO	<u>.</u>	167731
FAILURE MODE-CONTANIMATION. AS TOO HIGH (44NV). FAILURE THE RELATIONSHIP OF THE SOLD	FAILURE HODE-CONTANINATION. THE RENOTE-RATE GYRO PKG MAS REJECTED MHEN, DURING LOOP TESTS, THE YAW RATE GTRO MULL I AS TOO HIGH (44HV). FAILURE WAS CONFIRNED AND TEAR DOWN TESTS FOUND SMALL SOLDER SPECK INSIDE THE TORQUER COIL CUP. THE RELATIONSHIP OF THE SOLDER TO THE FAILURE COULD NOT BE DETERHINED.	REJECTED MACN, DURING STS FOUND SMALL SOLDE DETERNINED.	LOOP TESTS	1. THE -V	NA RATE GTRO NA TORQUER COIL.	3 . 3 8	
CORRECTIVE ACTION-VENDOR TO CHARS-1052-1, DATED OCTOBER 1962.	OR TO CHANGE QUALITY CONTROL AND MANUFACTURING TECHNIQUES. REF. HINNEAPOLIS-HONEYMELL REPORT ER 1962.	AFACTURING TECHNIOUS	3. RG. HE	a-Eapol 19	-HONEYNELL REI	T MO	
AUTOFILOT-ROUND-A/B GTRO PACKAGE	A-99-04-4077F GYRO-RATE/RESISTOR	FAR 27-04374-3	926029	FACTORY	TES HONETWELL NO JRS101A2		034520
FAILURE MODE-OUT OF TOLENANCE-THE GYRO WAS HE SENSITIVITY ADJUSTING RESISTOR WAS FOUND THEREFORE IT WAS NOT POSSIBLE TO DETERMINE	FAILURE MODE-OUT OF TOLERANCE-THE GYRO WAS REJECTED FOR HIGH E SENSITIVITY ADJUSTING RESISTOR WAS FOUND BLIGHTLY DANAGED. THEREFORE IT WAS NOT POSSIBLE TO DETERNINE IF THE RESISTANCE	ICH SENSITIVITY-THIS WAS CONFIRMED BY FUNCTIONAL TESTIMG—T ED. THE PURCHASED RESISTANCE VALUE COULD NOT BE DETERMINED NCE HAD CHANGED.	WAS CONFIRM	ED BY FL	ACTICHAL TEST NOT BE DETER	NI NED	
CORRECTIVE ACTION-NO G	CORRECTIVE ACTION-NO CORRECTIVE ACTION WILL BE TAKEN AS NO DEFINITE CAUSE OF	DEFINITE CAUSE OF I	FAILURE COULD BE DETERMINED.	. BE DE	FERMINED.		
AUTOFILGT-ROUND-A/B	A-29-04-3509-F DISPLACEMENT GYRO VIRING	FAR 7-04250-3	6£09£0	FACTORY	YES KEARFOTT NO		897211
FAILURE MODE-FAILURE DURING C E CONTEMED, PHASE A FLEXLEAD INPROPER TORRUING OF SYRO FLC	MERATION. DURING FACTORY OPEN AT TERMINAL POST AS MT: OR FLOW OF PLOTATION	VIB. TEST, GYRO LOST SPEED AND RESULT OF FLEXLEAD DISTORTION. MATL DURING COOL DOMN.	IED AND SMRI	LITE E)	SMED LITE EXTINGUISHED, FAILUM DISTORTION DUE TO HISHANDLING,	A11.08	
CORRECTIVE ACTION-HANDLING TION MATE.	LING ROHTS. REVISED PER HEND 556-2-5063. ALSO, BAFFLES INCORPORATED TO PRECLUDE FLOM OF FLOTA	IDES. ALSO: BAFFLES	INCORPORATE!) TO PREC	CLUDE PLOW OF	FLOTA	
					PAGE	PAGE 0042	

10 June 1946

9941 MAP 41	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBORN	¥			
BYBTER BUD-BYBTER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DATE DATE DIF	817E 71ME DIF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-ROUND-A/B	A-18-04-3484-F DIRFLACEMENT 6YRO	FAR 7-04230	420817	FACTORY	YES KEARFOTT NO	*****
FAILURE HODE-CONTANIMATIC FFERENT TEST POSITIONS. FA	FAILURE HODE-CONTANIMATION. THE 67RO WAS IR/D WHEN IT SHOWED SIGHS OF STICTION. PTERENT TEST POSITIONS. FAILURE WAS CAUSED BY CONTANIMANT PARTICLES IN THE FLUID.	D SIGNS OF STICTION. RTICLES IN THE FLUIC	THE FAIL	ORE IN	STICTION. THE PAILURE WAS CONFIRMED IN TWO DI THE PLUID.	
CORRECTIVE ACTION-THE VEN	VENOOR LAIS REGLESTED TO IMPROVE CLEANING, INSPECTION AND DAMPING FLUID FILTERING METHODS.	ING. INSPECTION AND	DAHPING P	LUID FILT	CRING METHODB.	
AUTOFILOT-ROMD-A/B GYRO PACKAGE	AKE-D043/FC-CO-DE-D006-DE1 Akklifier	COMPOSE TE-FACTORY	1480	FACTORY	9 9	
FAILURE HODE-OUT OF TOLER COMOS AFTER STAGIMG AT WHI IFTED.	OF TOLERANCE. THE PITCH BUCKOUT AMPLIFIER ACTION WAS NOT PRESENT AT STAGING TO APPROXIMATELY 18 NG AT WHICH TIME THE PITCH AXIS GYRO SIGNAL WAS UNGROUNDED. THE BUCKOUT AMPLIFIER IN THE AGE HAD	ACTION WAS NOT PRESS WAS UNGROUNDED. THE	NT AT STA	CING TO A	PROXIMATELY 19 SE IN THE AGE HAD DR	
SYSTEM EFFECT-ERRATIC OF	SYSTEM EFFECT-ERRATIC OPERATION, DUE TO AN IMPROPERLY ABJUSTED PITCM BUCKOUT AMPLIFIER IN THE AGE.	TED PITCH BUCKOUT AN	PLIFIER I	H THE AGE		
WENTCLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE DELAYED. POST COMPOSITE TESTING REGUIRED TO DENONSTRATE PROPER OPERATION.	QUIRED TO DEHONSTRA!	IE PROPER	OPERATION		
CORRECTIVE ACTION-THE AM	AMPLIFIEM WAS RE-ADJUSTED AND THREE POST COMPOSITE INTIGRATED TESTS WERE PERFORMED TO ASSURE.	OST COMPOSITE INTEG	1ATCD TEST	34 3634 8	FORMED TO ASSURE	·
AUTOFILOT-ROUND-A/B GYNO PACKAGE	A-99-04-3319-F DISPLACEMENT GYRO MAND	FAR 7-04250-3	\$080 33	FACTORY	VES REARFOTT NO	*****
FAILURE HODG-ENBATIC OFER	FAILURE HODE-ENRATIC OPERATION. INTERHITTENT SHED GUTPUT DURING MFG TEST TTE 18R-	RING MFG TEST TTE SI	÷			
CORRECTIVE ACTION-NOWE.	FAILURE NOT CONTINED.				And the second section of the section of the second section of the sect	.
AUTOFILOT-ROUND-A/B GYRO PACKAGE	AK62-0043/FC-CO-01-0006-021 Amplifier	COMPOSETE-FACTORY	149D 620901	FACTORY	9 9	•
FAILURE HODE-OUT OF TOLER DB AFTER BTAGING AT MHICH TO DUPLICATE THIS DISCREPA	OF TOLERANCE, PITCH BUCKOUT AMPLIFIER ACTION WAS NOT PRESENT AT STAGING AND APPROXIMATELY 19 SECON AT MATCH TIME THE PITCH AKIS GYRG SIGMAL AMPLIFIER WAS UNGROUNDED. POST COMPOSITE RETESTING FAILED) DISCREPANCY, HOMEVER IT REPEATED ON THE SECOND COMPOSITE TEST.	TION MAS NOT PRESENT A AMPLIFIER WAS UNGROUND BECOND COMPOSITE TEST.	17 STACING	AND APPR COMPOSITE	DETENTION OF SECON	
SYSTEM EFFECT-ERRATIC OPE E MOVEMENTS WERE OSSERVED	MATIC OPERATION- DUE TO AN IMPROPERLY ADJUSTED OBSERVED FROM STAGING AND TO 18 SECONDS LATER.		WLIFIER I	N THE AGE	PITCH BUCKOUT AMPLIFIER IN THE AGE, EXTRAMEOUS EMEIN	
WENICLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE DELAYED. POST COMPOSITE TESTING RESUIRED TO DEMONSTRATE PROPER OFERATION.	SUIRED TO DEMONSTRA	T PROPER	OPERA 11 ON	•	
CORRECTIVE ACTION-PITCH I	CORRECTIVE ACTION-PITCH BUCKOUT AMPLIFIER READJUSTED.					

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SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF T	BITE PRI	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOY-ROUND-A/B SYRO PACKAGE	SP-AB-GA-SSABF ROLL DISPLACEMENT GYRO	FAR 27-41002-909	1480	PACTORY YES		*****
FAILURE MODE-ELECTRICAL THE ROLL DISPLACEMENT 67R	FAILURE MODE-ELECTRICAL SHORT. THE GYROSCOPE PACKAGE FAILED DUE TO SLOW RESPONSE TO ROLL TORGUING TESTING REVEALED THE ROLL DISPLACEMENT SYRO HAD A PARTIAL SHORT CIRCUIT BETHEEN THE REFERENCE AND CONTROL WINDINGS OF THE TORGUER.	ED DUE TO SLOW RESPON WEEN THE REFERENCE AN	ISE TO ROLL ID CONTROL IN	TORBUING TE	STING REVEALED THE TORBUER.	
CORRECTIVE ACTION-VENDOR	MADE AWARE OF FAILURE AND REQUESTED TO IMPROVE 8-C	TED TO SHPROVE &-C OF	ALL FUTURE	ON ALL PUTURE WINDING OPERATIONS.	CRATIONS.	
AUTOFILOT-ROUND-A/B	##-##-Da-USSAM	FAR 27-41002-899	179D 620817	CTR YES		***
FAILURE HODE-OUT OF TOLE 2. TWO YESTS OF THIS UNIT BELIEVE THE YEST SET AT E	FAILURE HODE-OUT OF TOLERANCE, 8YRO PACKAGE HMS IR/D. IT HMS REPORTED THAT ROLL PROGRAM SLAVING HMS OUT OF TOLERAW E. THO TESTS OF THIS UNIT SHOKED NO IRREGULARITY OF OUTPUT. ALL READINGS WERE VERY CLOSE TO ORIGINAL SELL-OFF DATA. BELIEVE THE TEST SET AT ETR 18 FAULTY.	WAS REPORTED THAT BOL . ALL READINGS WERE !	L PROCRAM B	LAVING IMB	SLAVING WAS OUT OF TOLERANC TO ORIGINAL SELL-OFF DATA.	***************************************
CORRECTIVE ACTION-PROGRA	CORRECTIVE ACTION-PROGRAM INITIATED TO ISOLATE AND ELIMINATE TEST SET DESCREPANCIES BETWEEN PACTORY AND ETR TEST INFINIT.	MTE TEST SET DESCREP!	NCIES BETNE	EN PACTORY	AND ETR TEST EA	
AUTOFILOT-POUND-A/B GVRO PACKAGE	SP-66-04-3379F AMPLIFIER COUPLING RESISTOR	FAR E7-4100E-699	1790 620410	ar S S		•• 31 70
FAILURE MODE-OUT OF TOLE PLING RESISTOR MEASURED 3 300 OHHS TO 350. THIS CHA NT MAS CAUSED BY A FAULTY	FAILUME HODE-OUT OF TOLERANCE, THE GYRO CANISTER HAS REJECTED WHEN RESISTANCE CHECK ON THE YAW SIGHAL AMPLIFIER COUPLING RESISTOR MEASURED THE VALUE HAD CHANGED FROM SOO CHAS TO 350 CHAS INSTEAD OF 300 CHAS, EXAMINATION OF THE RESISTOR SHONED THE VALUE HAD CHANGED FROM 550 CHAS TO 350. THIS CHANGE IS THE RESULT OF A SHORT DURATION, HIGH AMELITUDE TRANSIENT DESING APPLIED. THIS TRANSIEN HI HAS CAUSED BY A FALLIT DOLMHEIREAN BERVOAMPLIFIER WHICH HAD FAILED. REF FAR 8P-9B-04-3364P.	CTED WHEN RESISTANCE SINATION OF THE RESIS' TION, HIGH AMPLITUDE I HAD FAILED. REF FAR	CHECK ON THE	E YAW BIGHU HE VALUE HI HEING APPLIE 184P,	L AMPLIFIER COU D CHANGED FROM D. THIR TRANSIE	
CORECTIVE ACTION-TRANSFORMER T-E REPLACED	CHER T-E REPLACED BEE FAR 3P-98-D4-3384P.	04-33647.				
AUTOFILOT-ROMD-A/B	SP-98-04-3360-F AMPLIFIER COUPLING RESISTOR	FAR 27-41703-409	1790	E 8		
FAILURE MODE-OUT OF TOLE	OF TOLEBANCE, THE THREE-RATE STRO SROUP WAS REJECTED FOR CONTAINING AN OUT-OF" TOLERANCE YAM SIGNA MERESISTOR. THERE WAS NO PAILURE IN THIS UNIT, FAILURE WAS FOUND IN MAIN UNIT.	WAS REJECTED FOR CON-	TOWN IN MAI	207-0F- 70LI	HANCE VAN SIENA	
	CORRECTIVE ACTION-NO PAILURE, NO CORRECTIVE ACTION TAKEN.	glada gaying maharing gariffica q dining biq qui since por				
					PAGE DO44	·

	DITTICOLIES REVIEW	DITTECTION REVIEW ACTORISE STREET					_
231474 231474-504	TEST/REPORT NUMBER FAILED COMPONENT HAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	VEHICLE BITE DATE DIF THE DIF	H TO	PRI VENDOR PART NO	
AUTOFILOT-ROMG-A/B	5P-98-04-33E1F	FAR E7-41DOE-888	1790	ETR	3	5/Q 3	• • • • • • • • • • • • • • • • • • • •
FAILURE MODE-ERRATIC OF THE A/P E7-41000-831 (I	FAILUME HODE-ERRATIC OPERATION-THE A/P 6YRO PACKAGE WAS MEJECTED WHEN ERRATIC VERNIER EMGINE MOVEMENT WAS OBSERVED. The A/P 27-41000-851 (IR 848171) WAS REJECTED AT THE SAME TIME. A COMPLETE ELECTRICAL PROOF CYCLE WAS RUM ON THE 6Y RO CANISTER THE REPORTED FAILURE WAS NOT CONFIRMED.	B NEJECTED WHEN ERRATIC AME TIME, A COMPLETE EL	VERNIER EI ECTRICAL P	HEINE HOV:	N E MAN N	AS CREENTD.	
CORRECTIVE ACTION-NOME.							
AUTOPILOT-ROMD-A/B 67RO PACRASE	A-99-DA-3518-F DISPLACEWENT GYRO	FAR 7-04£50-3	620731	FACTORY	YES KEARPOTT NO	ARFOTT	007230
FAILURE MODE-ENCESSIVE	FAILURE MODE-EXCESSIVE DRIFT. CORRECTIVE ACTION-MOME, FAILURE NOT CONFIRMED.	FAILURE NOT CONTINUED.					
CORRECTIVE ACTION-NOME.	. FAILURE HOT CONFIRMED.	•					
AUTCHILOT-RCIAD-A/B WYRO FACRAGE	3P-99-01-3326F 3FIN MOTOR THANSFORMER	FAR 27-41002-913	1310	FACTORY	YE 3		¥0000
FAILURE MODE-ELECTRICAL SHORT, GYRO PACKAGE HEN 194ER MAS APPLIED TO THE GYRO SPIN MOTORS N PHASE-C AND SEUTRAL IN THE PRIMARY WINDING.	L SHORT, GYRO PACKAGE IR/D RECAUSE 115Y 400-CPS 3-PHASE POWER-SUPPLY CIRCUIT BREAKER OPENED W O THE GYRO SPIN MOTORS, THE SPIN MOTOR TRANSFORMER (P/N TCS-T0065) MAS SHORT-CIRCUITED BETMEE K THE PRIMARY WINDING.	SE 11SV 400-CP3 3-PHASE MOTOR TRANSPORMER (P/N	POMER-BUP 123-70065	PLY CIRCU	11 BREA 81-C18C	KER OPENED W UITED BETNEE	
CONTECTIVE ACTION-NO I	NO INSEDIATE CORRECTIVE ACTION AS THERE HAS BEEN ONLY ONE OTHER FAILURE.	ERE HAS BEEN ONLY ONE O	THER FAILU	An .		magnitude money trans.	
AUTOPILOT-ROMD-A/B GYRO PACKAGE	A-99-04-3348F DISPLACEMENT 67RO-398D	FAR 7-04230-3	620719	FACTORY	7ES 50/0	۲	102741
FAILURE MODE-ELECTRICAL ME GTAO MAS DITABSÉMBLED	FAILUME MODE-ELECTRICAL OPEN, THE GYRO REPORTEDLY FAILED IN THE FACTORY WHEN AN OPEN SHED WINDING WAS DISCOVERED. T NE GYRO NNS DISASSEMBLED AND THE SHED FLEX LEAD WAS POUND DETACHED PROM THE GIMBAL TERMINAL POST.	ED IN THE FACTORY WHEN ND DETACHED FROM THE GI	AN OPEN SH MBAL TERHI	RD WINDIN	3	ISCOVERED. T	
CORRECTIVE ACTION-THIS BAL POST ON CLIP MEED IN	CORRECTIVE ACTION-THIS IS THE FIRST FAILURE OF THE NEW HEAVIER SMRD FLEX LEAD AND WILL BE STUDIED TO SEE IF THE SIN AL POST OM CLIP WEED REDESIEM. ALSO REF. FAR.A-DS-04-3180F.	HEAVIER SHAD FLEK LEAD 180F.	AND WILL	ek studik	0 to	E 1F THE 61N	
						PA6E 0048	

GENERAL DYN: HICE CONVAIR DIVIRION

10 104 1066	DIFFICULITES REVIEW-AUTOFILOT SYSTEM-AIRBORME	TOFILOT SYSTEM-AIRBON	7	T. Carrier Co.
STATES BY	TERTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE SITE PRI VENDOR PART NO	2
AUTOFILUT-ROUND-A/B GYRO PACKALE	SP-SD-04-3317F SYRO-BPIN NOTOR TRANSFORMER	FAR 27-41008-909	1245 MTR NO 820717 MO	093694
FAILURE MODE-OPEN-SYNO ED TO NEUTRAL AND B AND UMBILICAL FAILURE CAUSE R V-DG-8ES.	YNO CANISTER REPORTED TO HAVE PHASES B AND C NERE BURNED OPEN. MEASURENENTS SHOWED PHASE A SHORT AND C OPEN. THE SPIN MOTOR TRANSFORMER ET-D1395-3 MAS OFEN AND SHORTED. IT WAS CONCLUDED THAT A LUSED REVOC TO BE PUT ON THE 112 VAC TRANSFORMER WHICH CAUSED IT TO BURN OUT. REF. IR SILEAS, PFA	AND C WERE BURNED OF ET-D6395-3 MAS GPEN INBFORMER WHICH CAUBE	EN. MEASURENENTS SHOWED PHASE A S AND SHORTED. IT WAS CONCLUDED THA ED IT TO BURN OUT. REF. SR \$31248.	7 < f
CORRECTIVE ACTION-NOM	CORRECTIVE ACTION-NOME-AS THIS WAS A SECONDARY FAILURE.			
AUTOPILOT-ROUND-A/B GYRO PACKAGE	A-09-04-3386F RATE GTRO-SHED MACHET	FAR 27-04574-3	620700 PACTORY YES 60/C	603163
FAILURE MODE-FAIL TO O V. THE SAND MACHET WAS	FAILURE MODE-FAIL TO OPERATE. THE RATE GYRO PKG WAS IR/D POR NO SHRD OUTPUT. THE SHRC CIRCUIT WAS FOUND TO BE FAULT Y. THE SHRD MACHET WAS DEMACHATIZED. THIS WAS CAUSED BY EXTERNAL VOLTAGES BEING ERRONOUSLY APPLIED TO THIS CIRCUIT.	TERNAL VOLTAĢES BEIM	HE SHEC CIRCUIT WAS FOUND TO BE F.	¥.:
CORRECTIVE ACTION-ROTSONNEL AUTOFILOT-ROMD-A/B AE- 6YRO PACKASE	A6-98-04-3234F FAR FAN	FAR E7-47,000-851	1450 ETR YES NO	05570
FAILURE MODE-OPEN (ELEC SPECTED MA 60E. CORRECTIVE ACTION-CHECK	(ELECT). RECORDER DID NOT RECEIVE THE VERNIER EMGINE NUMBER ONE PITCH ACTUATION BIGNAL-FAILURE BU CHECK OUT EQUIPMENT TO BE BURNEYED AT ETR-FAILURE UNCOMPTRHED.	THIER ENGINE MUMBER	ONE PITCH ACTUATION BIGGAL-FAILUR!	3
AUTOFILOT-ROUMD-A/B	A-99-DA-3210-F DISPLACEMENT GYRO	FAR 7-04250-3	SEDSES FACTORY YES HEARFOIT NO CTO-ESGS-DOD	****
PAILURE MODE-OUT OF TOI CORRECTIVE ACTION-NOME.	FAILURE MODE-OUT OF TOLERANCE, GYRO EXHIBITED BIICTION DURING BENCH TEBTING IN FACTORY. Corrective action-nome, Failure not contirmed.	ISMS BENCH TEBTING IN	PACTORY.	

	A THE PARTY OF THE		The second secon	

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRHORNE

	•		100700		*****		100500			
PRI YENDOR KAME OTH VEGOOR PART NO		AVING BENBITIVI		TER AND A BEAR!	YES 6D/C NO		TES KEARFOTT NO	TO HAWE DISTOR	YES HIML-HOMEY NO	SROKEN TORSTON TIONALLY TESTED PAGE DOAT
M O T M	ž Š	ž	÷ 8	A I A	ž 3		5 2	3	ž g	T SECTION AND A
VEHICLE BITE DATE DIF TIME DIF	ETA	- PROGRA	ET.	# 6780 C	FACTONY		FACTORY		FACTORY	MARICH BA
VEHICLE DATE DIF	\$20020	MCE 1M RO	420425	IN THE RA	W20409	:	*0000	T RATE. 61	680383	BPOKEN TO
DIF CATA BOURGE PART NUMBER	FAR E7-4100E-899	LECTED FOR OUT OF TOLERA	FAR 27-41703-609	NA NOISE COULD BE MEAND	FAR E7-4100E-909	UNE CONTINUED ON FTR 175 REPAIRED.	FAR 7-04250-1	SE ESTABLISHED. E ACTION TAKEN.	FAR 27-04374-3	REJECTED POP A BUSPECTED ESPOND TO A RATE IMPUT,
TEST/TEPORT NUMBER FALSED COMPONENT NAME	87-88-04880F	OF TOLERANCE-THE 67RO CANISTER WAS REJECTED FOR OUT OF TOLERANCE IN ROLL PROGRAM SLAVING BENSITIVI	A-96-04-3235P	FAILURE MOSE-FAILED DURING OPERATION—A REPORTED GRINDING MOINE COULD BE MEARD IN THE RATE GYRO CANISTER AND A BEARI FOR FAILURE MAS BUSPECTED. CORRECTIVE ACTIVAN-FAILURE UNCOMFIRMED-ETR REQUESTED TO FURNISH MORE COMPLETE INFORMATION.	32-59-04-3£26C 6YRO-5PRD	FAILUNE MODE-OUT OF TOLERANCE-SHED OUTPUT WAS LOM-FAILUNE CONFIRMED ON FTR 17388. Corrective action-Gyno was replaced when canister was repaired.	A-89-04-3318F INTEGRATING RATE 6VRO	FAILURE MODE-OUT OF TOLERANCE, MFG. AREA REPORTED A HIGH OUT OF TOLERANCE DRIFT RATE. 67RO WAS FOUND TO MAVE DISTOR TED FLEX LEADS. CAUSE OF DISTORTED FLEX LEADS CCULD MOT SE ESTABLISHED. CORRECTIVE ACTION-UNITS HO LOWGER MADE SO MO CORRECTIVE ACTION TAKEN.	A-99-DA-3359F RATE 6YRO MEATER	FAILUME MODE-FAIL DUMING OPERATION. THE RATE GYRO WAS REJECTED FOR A BUSPECTED BPOKEN TORSICM BAR A BROKEN TORSIOM BAR IS NOWALLY EVIDEMCED BY INASILITY OF THE GYRO TO RESPOND TO A RATE RAPET THE RATE GYRO WAS FUNCTIONALLY TESTED AND THE FAILURE COULD NOT BE CONFIRMED.
I STATE OF S	AUTOFILOT-ROGGO-A/B BTRO PACEAGE	FAILURE HODE-OUT OF TOLERANCE-THE 67RO CANIBTER 77 (100 H164). CORRECTIVE ACTION-UNKHOMM. FAILURE UNCONFIRMED.	AUTOFILOT-ROUND-A/B GTRO PACKAGE	FAILURE MODE-FAILED DURING FAILURE MAS SUSPECTED. CORRECTIVE ACTION-FAILURE	AUTOPILOT-ROUND-A/B GYRO PACKAGE	FAILURE MODE-OUT OF TOLE CORRECTIVE ACTION-6780 b	AUTOFILOT-ROUND-A/B GYRO FACKAGE	FAILURE MODE-OUT OF TOLE TED FLEX LEADS. CAUSE OF CORRECTIVE ACTION-UNITS	AUTCHILOT-ROMD-A/B 6YRO PACKAGE	FAILURE MODE-FAIL DURING OPERATION, THE BAR IS MORMALLY EVIDEMCED BY IMASILITY OI AND THE FAILURE COULD NOT BE CONFIRMED.

SEMERAL DYMANICS CONVAIR DIVISION

	DIFFICUATIES REVIEW	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	382		
STSTEM SUD-SYSTEM	TEST/PEPORT HUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE PRI VE DATE DIF TIME DIF OTH VEN	PRI VENDOR MANE OTH VENDOR PART NO	
CORRECTIVE ACTION-WOME	CORRECTIVE ACTION-NOME AS PAILURE WAS NOT COMPIRMED.			<u> </u>	014710
AUTOPILOT-ROMB-A/B GTRO PACKAGE	A-99-04-3381F GTRO/DISPLACEMENT MEATER	FAR 7-04250-3	620325 FACTORY YES REARFOTT		• • • • • • • • • • • • • • • • • • • •
PAILURE MODE-ERRATIC OF THE IN	FAILURE MODE-ERRATIC OPERATION-THE UNIT WAS REJECTED DI E WAS CONFIRMED. THE INTERMITTANT WAS DUE TO IMPROPER C	URING MANUFACTURE FOR AL	DURING MANUFACTURE FOR AN INTERMITTENT FINE. HEJTER. CRIMPIES OF THE BPLICING CORNECTOR DURING ABSEMBLY.	THE PATLUR	•
CORRECTIVE ACTION-WIND	-VENDOR NOTIFIED AND HE STATED INCREASED CONTROL MOULD DE INITIATED IN THE MANUF. OF THE HEATER SE	NED CONTROL WOULD DE IN	ITIATED IN THE MANUF. OF TH	E HEATER SE	
AUTOPILOT-ROUND-A/B GTRO PACKAGE	A-99-04-3223F 67RO-TRANSFORMER	FAR	420525 FACTORY YES	<u> </u>	944600
FAILURE HODE-OPEN (ELE	(ELECT) . FEEDBACK TRANSFORMER ON TORGUER AMPLIFIER BOARD OPEN CIRCUITED WHEN HEATED DURING PINAL	NER AMPLIFIER BOARD OF	EN CIRCUITED WEN HEATED DU	RING PINAL	
CORRECTIVE ACTION- VENDOR	OR INSTRUCTED OC DEPT. TO MAINTAIN WERY CLOSE SURVEILLANCE OF SOLDER	IN WERY CLOSE BURVETLLA	HCE OF SOLDER JOINTS.		
AUTOPILOT-ROIMD-A/B GTRO PACKAGE	A-99-04-3356F RATE 67RO	FAR 7-04250-3	GEDSIS FACTORY YES KERFOTT NO NO		8847 <u>2</u> 0
FAILURE MOE-ERRATIC C AILURE COULD NOT BE CON E RESOLVED.	IC OPERATION, GYRO IR/D FOR AN INDICATED INTERMITTANT FINE HEATER INTERNAL SENSING ELEMENT. : CONTIRMED. THE BANE TYPE OF FAILURE WAS REPORTED ON A-89-04-3360F. ASAIN THE FAILURE COULD	ATED INTERMITTANT FINE (NA R-89-0)	HEATER INTERNAL SENSING ELE 4-5560F. AGAIN THE FAILLME	COULD NOT 8	
CORRECTIVE ACTION-NOME	HOME-FAILURE NOT CONFIRMED.		See and the control of the control o	And the state of t	
AUTOFILOT-ROMD-A/B 6780 PACKAGE	NZ-90-04-4007F DIBPLACEMENT GYRO HEATER	FAR 87-44534-3	42031E WTR YES		
FAILURE MODE-FAILED TO HACUITAY ETERNAL TO THE	FAILUME MODE-FAILED TO OPERATE AT PRESCRIBED TIME, ROLL GYRO FINE HEATER FAILED TO OPERATE. FAILUME ATTRIBUTED TO C ROLITRY ETERNAL TO THE GYRU PACKAGE.	L GYRO FINE HEATER FAIL	ED TO CPERATE. FAILURE ATTR	STORED TO C	
CORRECTIVE ACTION-NOME.	. PAILUME NOT CONFIRMED.	,			
AND CONTRACTOR OF THE PROPERTY				PA6E 0048	

SENENCE DYNAMICS CONVAIR DIVISION

	15 JUN 1066	DIFFICULTIES REVIEW-AUTOPILOT STREM-AIRSORME	ILOT STREM-AIRBORN	<u>.</u>				_
<u> </u>	878TEM 848-878TEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	11 NE 01F	# 5 # 2	VENDOR HANE	
4-3-5	AUTOFILOT-ROUGD-A/B STRD PACKAGE	A-86-04-32387 CIRCUIT BOARD	FAR 87-41008-859	31.5	DYESE	4 C		094334
	FAILURE MUE-OFFH (ELECT AUSE OF FAILURE OF THE HO	(ELECT). MO 80 OM SMRD DURING CHECKOUT. FAILURE AMALYSIS REVEALED P/M 27-45185-3 MAD NO OUTPUT. C THE MODULE COULD NOT SE DETERMINED MODULE WAS DESTROYED DURING DEPOTTING.	IILURE AMALYBIB REVE HAB DEBTROYED DURIN	ALED P/N 6 DEPOTT	27-43105 NG.	-S HAD NO	OUTPUT. C	
	CORRECTIVE ACTION-UNKNOWN.		F) 12ml	07.41	A-3	YES		682734
<u> </u>	AUTOPILOT-ROMO-A/B EYRO PACKAGE	AEGE-0333/83-451-00-227 ROLL DISPLACEMENT GYRO		420311		ĝ		
	FAILURE MODE-OUT OF SPEC AVE BEEN A SLOW ROLL GYRO OR (SMRD).	FAILURE MODE-OUT OF SPECIFICATION. AN ERROR OF 9.2 DEGREES OCCURRED IN THE ROLL PROGRAM. THE ERROR IS BELIEVED TO M AVE BEEN A SLOM ROLL GYRO SPIN MOTOR ROTATION SPEED. THIS NISSILE DID NOT INCORPORATE THE SPIN MOTOR ROTATION DETECT OR (SMRD).	CCURRED IN THE ROLL ISILE DID NOT INCORP	PROGRAH.	THE ERR	OR IS BELI	EVED TO H ON DETECT	
	SYSTEM EFFECT-IMPROPER AMALOG SIGNALS.	MALOG SIGNALS.						
	VEHICLE EFFECT-IMPROPFY	VEHICLE EFFECT-INPROPER TRAJECTORY. A LARGE GUIDANCE YAM STEERING COMMIND WAS ISSUED TO CORRECT VEHICLE AZIMUTH.	CERTING COMMING MAS 1	SSUED TO	CORRECT	VEHICLE AZ	IMUTH.	
	CORRECTIVE ACTION-ECP 10	CORRECTIVE ACTION-ECP 1001 AUTHORIZES INSTALLATION OF SHRD C	SHED OF MISSILES 143D AND ON-	ż				4
·	AUTOPILOT-ROMD-A/B	A-99-D4-3224-F GYRO-DISPLACEMENT HEATER	FAR 7-04250-1	620507	FACTORY	YES KEARFOTT NO T-ESGG-EA	017 6-EA	
	FAILURE MODE-ERRAVIC OF	FAILURE MODE-ERRATIC OPERATION-INTERMITTENT GYRO HEATER SÉNSING ELENEMT.	ling Element.					
	CORRECTIVE ACTION-UNKNOAN	CORRECTIVE ACTION-UMENOUM, PROVLEM WILL BE REPT UNDER BURVEILLANJE, FAILURE COMFIRMED, FAILURE POSSIBLY OCCURRED IN THE ASSOCIATED CIRCUITAT.	ILLANCE, FAILURE CO	FIRMED. P	ATLURE P	OSSIBLY OC	CURRED IN	
<u> </u>	AUTOFILOT-RCIMO-A/E GYRO PACKAGE	A99-04-5327F 6780-8ATE	FAR 7-04850-5	620423	FACTORY	YES KEARFOTT NO	110	***************************************
	FAILURE HODE-OUT OF SPEC MECHANICAL BINDING DUE T	OF SPECIFICATION. TWO RATE SYROS FAILED DURING CHECKOUT, CAUSE OF FAILURE WAS STICTION CAUSED BY NE DUE TO FRICTION, MECHANICAL BINDING, OR CONTANINATION WITHIN THE GYRO.	TING CHECKOUT, CAUSE CONTANIMATION WITHIN	OF PASEL	* * * * *	TICTION CA	(39ED BY A	
	CORRECTIVE ACTION-UNKNOW	CORRECTIVE ACTION-UNKNOWN. TWO ADDITIONAL TESTS FOR STICTION HAVE BEEN INSTITUTED AT RECEIVING AND INSPECTION.	HAVE BEEN INPTITU	TED AT REC	EI VING A	NO INSPECT	101.	

	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	OFILOT STRIEM-KIRBON	¥			ſ
3787EM 848-8487EM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	PRI VENDOR NAME OTH VENDOR PART NO	······································
AUTOFILOT-ROMD-A/B SYNO PACKAGE	A-89-04-3222-F DISPLACEMENT SYRO HEATER	FAR 7-04250-8	420417	PACTORY	YES KEARFOIT NO CTO-2506-000	******
FAILURE MODE-ELECTRICAL (RICAL OPEN, DUE TO OPEN LEAD ON HEATER BENSING ELEMENT CAUGED BY FAULTY CRIMFING.	ENSTNG ELEMENT CAUDE	D BY FAULT	Y CRIME!	į.	
CORRECTIVE ACTION-VENDOR	MOTTETED TO IMPROVE GUALITY CONTROL	OL OF CRIMPING OPERATION.	TION.			
AUTOFILOT-ROAD-A/B GYRO PACKAGE	SP-98-04-3130F Gyro-displacemt-bearing	FAR 58-41002-809	104b \$20320	ET.	ves 10	*****
FAILURE MODE-CONTANTMATTS MOYED AND OPENED, A HOTOR	NIMATION, THE CANISTER EXHIBITED AN INTERMITTENTLY NOISY SPIN MOTOR. YAW DISPLACEMENT GYRO MAS RE A MOTOR BEARING MAS FOUND TO BE FULL OF DUST CREATED BY LACK OF LUBRICANT.	RMITTENTLY MOISY SPI IUST CREATED BY LACK	N MOTOR. Y OF LUBRICA	AV DISPU	CEMENT GYRO MAS RE	
CORRECTIVE ACTION-GYRO M	-64RO MAS REPLACED MITH NEW 67RO 'ASIGN CONTAINING IMPROVED SPIN MOTOR.	CONTAINING IMPROVED 8	PIN MOTOR.			
AUTOPILOT-ROUND-A/B	A-68-04-3147F HEATER	FAR 27-45045-5	33F 620314	SYCAMORE YES	7E3 NO	*****
FAILURE MODE-FAILED DURING OPERATION. FOR GYRO HEATER TO COME ON AND SYSTEM FPERENTIAL TOO SMALL BETWEEN THE OPERAT	FAILURE MODE-FAILED DURING OPLRATION, GYRO FAIL BAFE LIGHT DROPPED OUT DURING OPERATION, FOR GYRO HEATER TO COME ON AND BYSTEM TO RETURN TO OPERATION, THE FAILURE WAS CONFIRMED, PFERENTIAL TOO SMALL BETWEEN THE OPERATION AND FAIL BAFF, THERMOSTATS.	GERO FAIL SAFE LIGHT DROPPED OUT DURING OPERATION. TO RETURN TO OPERATION, THE FAILURE WAS CONTINED. HOW AND FAIL BAFF THERMOSTATS.	OPERATION. CONFIRMED.		FIVE MINUTES NERE REQUIRED CAUSED BY A TEMPERATURE DI	
CORRECTIVE ACTION-ECP 19	CORRECTIVE ACTION-ECP 1007 CHAMGED FAIL BAPE THERMOSTATIC TEMPERATURE FHOM 30 PLUS OR MINUS S DEGREES F TO 20 PLUS H MINUS S DEGREES F.	TEMPERATURE FHOM 50	PLUS OR HI)30 6 ENH	REES F TO 20 PLUS	
AUTOPILOT-ROUM3-A/B	AD62-G021/DA676/LE-404-00-112 HOTOR	COUNTDOWN R7-41 703-808	1120 620305	PALCI-E	YES 60/C	166931
FAILUNT MODE-PAIL DURING	SCHOOL BARD BICKAL TO THE	AT T-170 MINUTES DUE TO THE PAILURE OF	TO THE FAI	רחוב סב	A GYRO SPIN MOTOR.	
	WICE STONALS.	,				
VEHICLE EFFECT-COUNTDOWN	VENICLE EFFECT-CAMTDOAM ABONTED AND RESCHEDULED.					
CORRECTIVE ACTION-UNKNOWN.	4. (FAR 90-04-8170)	ingeneration of the state of th				
			,			
	essamble solimiterial countries (spirital properties and solital spirital	audininderstaan die Stellen der stellen der deutsche der des deutsche der der der der der der der der der de		an felentennismismismismismismismismismismismismismi	P. 6C 0030	-7-7

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BIFFECUATIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

212 TO 10 TO	TEST/METONT MANGES FAILED CONFORENT MANG	DIF DATA BOUNCE PART MUNDER	WENTELE DATE DIF	917E 71ME 01F	EŠ	VOIDOR NAME VOIDOR PART NO	-
ANTOPILOT-ROMB-A/B GTRO PACKANE	A-88-04-3146F	FAR 87-4100 2-6 58	136	Ē	58	ž	1
FAILUME MODE-CUT OF TOLERA PERATURE SENSITIVE. CORRECTIVE ACTION-LABORAL.	MCDE-GUT OF TOLERANCE-THE SHED GUTPUT WOLTAGE MAS LOW (-8,05VDC). FAILURE CONFIRMED. SHED CHANGEL 5 MAS TEN SENSITIVE. IVE ACTICH-LUBINCHAI.	M (-0.05VDC). FAILL	AE COM IN		8		
AUTOFILOT-ROMO-A/B STRO PACIACE	DA673-02-640-14-03 7AM DIBPL, 67RO	CONFOST TE-FE9/DPL	34 eccess	FACTORY	5 5		3
FAILURE MODE-OUT OF TOLERAN DISTEM EFFECT-INFROFER ANAL AND ON THE WIDRALLIC SYSTEM EDOD PSI. BY THIS TIME THE E WEMICLE EFFECT-COUNTDOM AN	FAILURE MODE-OUT OF TOLIDAMCE. AUTOFILOT FAIL RED INDICATION. STATCH EFFECT-IMPROFER ANALOG SIGNALS. THE HIGH YAM GTRO CUITUT DRONE THE EMBINES HAND OWER WHICH PLACED SUCH AND ON THE WIDRALLIC SYSTEM THAT PRESSURE FELL RELOW 1750 WHICH GROUNDED THE GYRO LWITL. PRESSURE INCREASED AGAI EDOD PAIL BY THIS TIME THE EMBINES HAD RETURNED TO A MALL. THE CYCLE THEN REPEATED ITSELF. WENICLE EFFECT-COUNTDOMN ABORTED AND RE-SCHEDULED.	I. PUT DROVE THE EDIESS CH GROUNDED THE EYE E CYCLE THED! NEDIEZA	ES HAND O NO UNTIL P ND 178E.F	MER WHICH	3 3 3	OVER UNION PLACED SUCH A DEN PRESSURE INCREASED AGAIN TO F.	
AUTOFILOT-ROUGHAND A-99-DA GYRO PACKAGE BIGHAND BIGHAND FALLISE MODE-FREEZIE OFFEATION	A-69-04-3148F BIGMAL AMPLIFIER S7-41676-5 BIGMAL AMPLIFIER NO BIGMAL AMPLIFIER NO BIGMAL AMPLIFIER NO BIGMAL AMPLIFIER NO BIGMED FAILURE MALLINE AMPLIER NA BIGMED FAILURE MALLINE AMPLIER NA BIGMED FAILURE MALLINE DATE OF THE CONTROLLER NA BIGMED FAILURE NA BIGMED	FAR 27-41676-5 877-41676-5	221028	FACTORY	20		<u> </u>
BUT WAS BELIEVED TO BE CAUSED CORRECTIVE ACTION-UNKNOWN.	5 •	A.ITIGA.					
AUTOFILOT-ROUND-A/B GYRO PACKAGE	AE81-0278/FC-4CO-02-118 FLIPFLOP BMITCH	CORPORT TE-FACTORY 27-43702-8	520119 0611		88	3/ 0	827
FAILURE MAY THAT DURING THE TOWN STAINER YAN FORTE ALL BLOOM BETAINED THE GUIDANCE CHECKOUT BETAINED BEATEN BY STEEL BANDONER ANALOS BIGNALS-UNEXPECTED.	FAILURE HANS TAVE DIRIGHOUS THE TOWN SUBTAINER YAN INDICATED AN UNEXPECTED NEGATIVE TORGUING AT 117 SECONDS, AN UNEXP STATE ALLERING SEGNAL MAS EVENUET TO THE FILM THE RECORDER AT THE BANE TIME, A PLIPFLOP SHITCH IN THE MESANGE GE ERATION PORTION OF THE GUIDANCE CHECKOUT SET HIS HEATING. SEATION PORTECT-INFROPER ANALOS SIGNALS-UNEXPECTED NEGATIVE TORGUING TO SHATCHER YAN CHANNEL CAUSED BY DEPECTIVE AGE	NA UNEXPECTED NEGATIONS OR AT THE BANE TINE DRAUGHT TO SHATAINE	INE TORGUI . A FLIPFI R YAW CHAN	OF SULTO	7 × 8	AT 117 SECONDS, AN UNEXP BATTCH IN THE MESSAGE GE CAUSED BY DEFECTIVE AGE	
WENTELE EFFECT-COMPOSITE RI CORRECTIVE ACTION-FLIPFLOP	WENICLE EFFECT-COMPOSITE RESCHEDULED, RERUN OF COMPOSITE MADE. CORNECTIVE ACTION-FLIPFLOP SMITCH REPLACED.	ż					
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	DIREICULTIES SEVIEW-AUTORILOS STRIEM-ALXBUNNE	TOP: LOT STSTEM-AIRBO	*		r
BYSTEN SUB-STSTEN	TESTARFORT NUMBER	DIF DATA BOUNCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	PRI YENDOR NAME	
AUTOFILOT-ROUND-A/E	AES1-0934;/FCA-4CO-02-140 6780-013PLACEMENT	COMPOST TR-PACTORY	\$700 \$700 \$700 \$700 \$700 \$700	4 O	<u>i</u>
FAILURE MODE-FAIL DURI	URING OPERATION- THE YAW DISPLACEMENT BYRO GID NOT OPERATE.	THO GID NOT OPERATE.			
SVATEN EFFECT-YAM GIRO DID NOT START.	O DIE NOT START.				
WEHICLE EFFECT-COMPOSE	WENICLE EFFECT-COMPOSITE RESCHEDULED- COMPOSITE RE-RAM-				
CORRECTIVE ACTION-NEM	CORRECTIVE ACTION-REMLACED ALL DISPLACEMENT GYROS.				
AUTOFILOT-ROMD-A/B GYRO PACKAGE	AUG1-GEED/DASES/LZ-4MO-04-97 67RO	COMPOST TE-PRD/DPL	97D PALCS-8 810629	2 5	
FAILURE HODE-OUT OF TO	TOLERANCE PITCH RATE GTRO HAD AN OUT OF TOLERANCE BIGHAL LEVEL OF PLUS 2:89 DESMEES DURING STAT	OF TOLERANCE BIGHAL L	EVEL OF PLUS 2.65	DESREES DURING STAT	
STATEM EFFECT-INFROPER ANALOG SIGNALS.	R AMALOG BIGNALB.				
WEHICLE EFFECT-MOME.					
CORRECTIVE ACTION-PLIS	CORRECTIVE ACTION-FLIGHT CONTROL CANISTERS REPLACED.				
AUTOFILOT-ROUND-A/B GYRO PACKAGE	GR-04-207 AMPLIFIER	FAR 7-41015-819	950 MTR 610503	2 2	**************************************
FAILURE HODE-OUT OF TO CAUSED BY APCHE IMBTRU TH OMLY MISSILE LOADS	FAILURE HODE-OUT OF TOLERANCE, GYRO ASSEMBLIES B/N 52 AND BII-0068 HAD NO-GO ON APCHE CHECK FOR LOW TORGUING GAINS. CAUSED BY APCHE INSTRUMENTATION LOAD AND VARIATION IN BIGNAL AMPLIFIER OUTPUT INMEDANCE. GAINS WERE IN TOLERANCE WI IN ONLY HISSILE LOADS	B11-0068 NAD NO-GO C	N APCHE CHECK FOR IMPEDANCE, GAINS	LOM TORQUÍNG GAINS. NERE IN TOLERANCE NI	
CORRECTIVE ACTION-EMLA SIGNAL AMPLIFIERS.	CORRECTIVE ACTION-EMARGED APCHE TOLERANCES FOR TORGUING TEST AND ASTABLISHED UPPER OUTPUT INFEDANCE LEVEL FOR STROSSCALL AMPLIVIERS.	TEST AND CSTABLISHED	UPPER CUTPUT INFE	DANCE LEVEL POR 67RO	
AUTOPILOT-ROME-A/B 6780 PACKAGE	CA-04-180 DISPLACEMENT GYRO	FAR 7-41015-918	950 MTR 610381	2,0	****
FAILURE MODE-CUT OF TO A ROLL TORBUCING INPUT	FAILURE MODE-CUT OF TOLERANCE, DURING APCHE TEBTS THE ROLL DISPLACEMENT OUTPUT WAS ABOVE SPECIFICATION LIMITS WHEN A ROLL TORSHEING INPUT WAS APPLIED. BELIEVED CAUSED BY TEST ESUIPMENT.	. DISPLACEMENT OUTPUT F. EBUIPHENT.	MAS ABOVE SPECIF	ICATION LIMITS WHEN	
CORRECTIVE ACTION-NOME	CORRECTIVE ACTION-WOME, FAILURE NOT COMPIRMED.			٠.,	
				PAGE DOSE	_

	2201 257 21	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT STATEM-AIRBOAME	¥					٦
	BTATEM \$46-\$Y\$TEM	TEAT/MEPONT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	11 ME 01F	¥ 5	VENDOR HANK	PRE VENDOR NAME OTH VENDOR PART NO	
	AUTOFILOT-ROMD-A/B	GR-04-183 DISPLACEMENT 6780 MINIMO	FAR 7-41015-818	950 610315	# E	469 40	YES KEARFOTT HO	-	******
	FAILURE MODE-ELECTRICAL E 10 THE C PHASE FLEX LE	FAILURE HODE-ELECTRICAL SHORT, DURING CHECKOUT THERE WAS NO OUTPUT FROM THE PITCH DISPLACEMENT GYRO. FAILURE WAS DU E to the c phase plex lead short circulting to the comer cap asceptur.	NO OUTPUT FROM THE PI CAP ASCEMBLY.	TCH DISPLA	CEHENT 6	¥80.	AILURE	3	
	CORRECTIVE ACTION-INTERIOR OF ACTION TAKEN TO RETROFIT ALL SPIN MOTOR DETECTOR CIRCUITS.	CORRECTIVE ACTION-INTERIOR OF COVER CAP ASSEMBLIES MAYE BEEM COATED WITH INSULATION MATERIAL SINCE ABOUT 4-13-1960 ACTION TAKEN TO RETROFIT ALL GYRO ASSEMBLIES WITH THE INSULATED COVERS AT THE BAME TIME THEY ARE RETRO-FITTED MITH PIN MOTOR DETECTOR CIRCUITS.	BEEN COATED WITH INSUL SULATED COVERS AT THE	ATION MATE	FIAL SIN THEY ARE	CE ABG	7 PF117G	SINCE ABOU! 4-15-1960. ARE RETRO-FITTED MITH	
	AUTOFILOT-FOLMD-A/B	9C-04-174	FAR 7-41015-919	610 6102£3	2	Y C			ž.
	FAILURE HODE-FAIL DURING OPERATION. EEN CAUSED BY OTHER SOURCES THAN THE	DURING OPERATION, DURING AN APCHE RUN SEVERAL NO-GO INDICATIONS MERE RECORDED. BELIEVED TO MAVE 2 SOURCES THAN THE AUTOFILOT.	BEVERAL NO-60 INDICATI	ONS MERE R	ECONDED.	9 EF 116	TVED TO	MAYE &	
	CORFECTIVE ACTION-NOME.	FAILURE NOT CONFIRMED.							
	AUTOFILGT-ROUND-A/B GTRO PACKAVE	AE60-0954/P4-402-00-87 DISPLACEMENT 67RO	P.ISHT	67D 610221	# 1	ž 0			46137
	FAILURE MODE-CUT OF EXPECTED TEST VALUS D FLIGHTS. MAXIMUM PEAK-TO-PEAR RATES AND 13.7 ELEGASEC IN PALL AT 84 SECONDS.	FAILURE MOCE-CUT OF EXPECTED TEST VALUE-PROPELLANT SLOSM AMPLITUDES WERE CONSIDERABLY LARGER THAM ON PREVIOUS SERIE S D FLIGHTS. MAXIMUM PEAK-TO-PEAK RATES BEING 4.8 DEG/SEC IM YAM AT 80 SECONOS. S.8 DEG/SEC IN PITCH AT 83 SECONOS. AND 13.7 ECG/SEC IM MALL AT 84 SECONOS.	AMPLITUDES WERE CONSI	DERABLY LA	RGER THA	10 A 10 A 1	PREVIOUS 7 83 3E	S SERIE CONDS.	
	BESTEN EFFECT-NOME.								
	VEHICLE EFFECT - NOME, MO ADVERSE EFFECT MAS N NDICATED AT 85.5 SECONDS WITH A SUBSEQUENT DEC. VE OF ENGINE GINDALLING IN RESPONSE TO 1 CPS M R AND RUSTAINGR VERMIER HYDRALLIC SYSTEM DATA.	VEHICLE EFFECT- NOWE, AS ADVERSE EFFECT WAS NOTED, HOWEVER, AN ABNORMAL RISE IN LOX TANK PRESSURE (2.56 PSIG) WAS I NDICATED AT 65.5 SECONDS WITH A SUBSEQUENT DECAY TO STEADY-STATE BY 122.2 SECONDS. ALSO, I CPS OSCILLATIONS INDICATI VE OF ENGINE GINSALLING IN RESPONSE TO I CPS MISSILE OSCILLATIONS CAUSED BY PROPELLANT SLOSNING NERE NOTED ON BOOSTE R AND EUSTAINER VERNIER HYDRALLIC SYSTEM DATA.	WAS NOTED. HOWEVER, AN ABNORMAL RISE IN LOX TANK PRESSURE (2.56 PSIG) WAS IN OCCAY TO STEADY-STATE BY 122.2 SKCOMDS. ALSO, I CPS OSCILLATIONS INDICATIONS WISSILE OSCILLATIONS CAUSED BY PROPELLANT SLOSHING NERE NOTED ON BOOSTED DATA.	IN LOX TANGOS. ALSO, OPELLANT SA	PRESSUR 1 CPS OS OSHINE N	STEEN STEEN	26 P316 710W3 1	MAS I	
	CORRECTIVE ACTION-AUTOFILOT GAIN C. ION GAINS BETWEEN LATHCH AND BS BEC. RNIER ROLL POFITION AND RATE GAINS.	CORRECTIVE ACTION-AUTOFILOT GAIN CHANGES NERE EFFECTED FOR 100D. THESE WERE 19 PCT REDUCTION IN FITCH AND FAM POSIT ON GAINS BETWEEN LATHON AND 83 SECONDS, A 10 PCT INCREASE IN FITCH AND YAW RATE GAINS, AND A 100 PCT INCREASE IN VE HIER ROLL POSITION AND MATE GAINS.	CM 1000, THESE WERE IN	FCT #E3UC	T1CN IN	27.7	AND TA	E IN VE	
	AUTOFILOT-ROUND.A/B GVRO PACKAGE	96-34-198 DISPLACEMENT GYRO	FAR 7-cidis-sis	1020	S. S.	2 0			····
1	PAILURE MOE-GUT OF TOLI INCAPATIBILITY RETMEEN	FAILURE MODE-CUT OF TOLERANCE. DURING TEATING THE DISPLACENENT GYRO TORBUING RATES WERE LOW. BELIEVED TO BE DUE TO INCOMPATIBILITY RETMEEN THE FACTORY AND FIELD TESTING.	CEMENT GYRO TORGUING	RATES WERE	104. BEL	e va	10 pt	out to	
				entary suppression of the second seco			4	PAGE DOSS	

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4961 MO7 81	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORING	JOPILOT SYSTEM-AIRBOR	¥			,
BYSTEN BUB-STATEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE DATE DIF	VEHICLE SITE PI DATE DIF TIME DIF O	PRI VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-FAI	CORRECTIVE ACTION-FAILURE NOT CONFIRMED, 40/C INITIATED ACTION TO EXCREASE THE COMPASSIBILITY SETNEEN FACTORY AND	ICTION TO EXCRENSE THE	COMPATIBI	LITY BETWEE	IN FACTORY AND F1	064230
AUTOFILOT-ROUND-A/8	88-54-113 47RO-RATE	FAR 7-04250-1	002019	ATR TE	TEB REARFOTT MO	100
FAILURE MODE-OUT OF 1	FAILUME MODE-OUT OF TOLEMANCE. GTRO WAS EMITTIMS AUDIBLE NOISE DUE TO BEARING LUBE DEPLETION. Confective action-yedgor has changed cleaning Process and increased bearing Retainer Porosity.	NOISE DUE TO BEARING INCREASED BEARING RE	LUBE DEPLE	11.04. 04.17*.		· · · · · · · · · · · · · · · · · · ·
AUTOFILOT-ROUND-A/B	20-04-113 CYRO-RATE	FAR 7-04250-1	002010		YES REARFOTT	
FAILURE MODE-OUT OF SPE CORECTIVE ACTION-MOME.	OF SPECIFICATION: UNIT WAS REJECTED FOR HIGH ENITTEN FOLLOWER OUTPUT. FAILURE WAS NOT CONFIRMED.	HIGH ENITTER FOLLOWER	OUTPUT. #	ATLURE WAS	NOT CONTINUED.	
AUTOFILOT-ROIND-A/B	90-04-201 67RO-51 SPLACINENT	FAR 7-41015-818	6 1011 £	WTR 1E	63 (• • • • • • • • • • • • • • • • • • •
FAILURE NODE-OUT OF 1	FAILURE NODE-OUT OF BPECIFICATION OR TOLERANCE-NINOR LACK OF CENSITIVITY DURING CAPCHE LNECKB. CORRECTIVE ACTION-INCREASED THE COMPATIBILITY AND ACCURACY OF STRO PACKAGE TESTING.	I OF CENSITIVITY DUFIN	FING CAPCUE 4	#£CK#.	·	
AUTOFILOT-ROUND-A/B GYRO PACKAGE	80-04-203 6YRO-RATE	FAK 7-4151.5-618	111010	7 X	VES 60/C NO	****
CORRECTIVE ACTION- INC	CORRECTIVE ACTION-INCREAGED THE COMPATIBILITY AND ACCURACY OF 6TRO PACKAGE TESTING.	TY OF EVRO PACKAGE TE	717 3.			
					PA6C 0034	r-

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	18 JUN 1866	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	PILOT BYSTEM-AIRBORN	ين			-
	SYSTEM SIG-SYSTEM	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF TI	TIME DIF OTH	TH VENDOR PART NO	
4	AUTOFILOT-ROUND-A/B GYRO PACKALE	AES1-0013/FC-4CO-01-104 HARNESS	COMPOST TE-PACTORY	104D \$1010\$	<u> </u>	40	******
	FAILURE MODE-ELECTRICAL-OPEN. SE DESIGN ERROR. HARMESS WIRED	CTRICAL-OPEN. WERNIER EMGINE NO. 1 DID NOT RESPOND IN THE CLOSED LOOP ROLL AXIS DUE TO A \$TRO PACKA Harners wired incorrectly.	RESPOND IN THE CLOSE	ם רספה אמרו	AKIR DU	TO A STRO PACKA	
	SYSTEM EFFECT-OPERATION DOES NOT START.	DOES NOT START.					
	VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED-TWO ADGITIONAL COMPUSITES MERE PERFORMED MITH THIS KHOMM HARNESS ERROR.	TES WERE PERFORMED !	ATH THIS EA	NAM MAN	ISS ERROR.	
	CORRECTIVE ACTION-RENORM	CORRECTIVE ACTION-REMORE TO BE ACCOMPLISHED AS A SITE TASK.					
	AUTOFILOT-ROMD-A/B	GR -04-140 AMPLIFIEE-RES18TOR	FAA 7-41015-919	990 MTR 601213		7 E8	
	FATURE MODE-OUT OF TOLE ST. ALLURE DUE TO CRACKE	FATURE HODE OUT OF TOLERANCE- BOOSTER ENGINE NO.1 DISPLACED APPROXIMATELY ONE THIRD EXPECTED ANOUNT DURING LOOP TE ST. AILURE DUE TO CRACKED TRIMNING RESISTOR R-2. O CAUSE UNDETERMINED.	D APPROXIMATELY ONE DETERMINED.	THIRD EXPEC	TED AMOU	AT DURING LOOP TE	
	CORRECTIVE ACTION-UNKNOW	M-JAKHOHM, GD/C TO MONITOR FAILURE RECORD OF THIS NODULE TO DETERMINE IF ANY OTHER FAILURES OF THIS	F THIS NODULE TO DET	CRHINE IF	INY OTHER	FAILURES OF THIS	-
	AUTOFILOT-ROUND-A/B GTRO PACKAGE	DAESS/BS-4MO-D1-00 SIGNAL AMPLIFIER	COMPOST TE-FAD/DPL	3r 601212	÷ 2	768 KO	***
	FAILURE MODE-FAIL DURING	FAILURE MODE-FAIL DURING OPERATION. BIGMAL AMPLIFIER DEFECTIVE IN PASSING NEGATIVE BIGMAL TO FILTER.	IVE IN PASSING NEGAT	TWE SIGHT	TO FILTE		· · · · · · · · · · · · · · · · · · ·
	SYSTEM EFFECT-IMPROPER /	SYSTEM EFFECT-IMPROPER AMALOG SIGNALD. FAULT INDICATIONS RECEIVED ON WERNIER 1 AND WERNIER 2. VAW BIAS-BOOSTER AND WERNIER 5 GAINS DURING ROLL, PROGRAM WERE INCOMPATIBLE.	CEIVED ON VERHIER S	AND VERNIES	E. TAM	STAS-BOOSTER AND	
	VEHICLE EFFECT-COUNTDOMN DELAYED.	H DELAYED.					
	CORRECTIVE ACTION-UNKNOWN.	- 144					
3	AUTOFILOT-ROUND-A/B GYRO PACKAGE	9D-04-184 DISPLACEMENT GYRO HEATER	FAR 7-41015-819	#01117 W	# Z	YES KEARFOTT NO	:
	FAILURE MOCE-OUT OF TOLE OUT OF TOLERANCES. DURING	FAILURE MODE-OUT OF TOLERANCE, DURING CAPCHE TEBTS 13 NO-SO WERE RECEIVED, NO-SO MERE POUND TO BE MINOR CALIBRATION Out of tolerances, during calibration at san dieso the Roll Stro Heater was noted to be erratic due to a Prayed Wir In the Canister.	MERE RECEIVED, NO-	PO MERE FOUR	S TO BE	HINOR CALIBRATION E TO A FRAYED WIR	
	CORRECTIVE ACTION-MOME.	CORRECTIVE ACTION-MOME, ORIGIN OF FRAYED WIRE COULD NOT BE DETERMINED. CONSIDERED AN INCLATED CARE,	DETERMINED. CONSIDE	1EU AN 180L	ATED CAME		

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	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	PILOT SYSTEM-AIRBOR			
SYSTEM BUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPOSENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	PRI VENDOR NAME	
AUTOFILOT-ROUND-A/B SYNO PACKASE	BD-04-185 DISPLACEMENT GYRG	FAR 7-41013-910	601116 WTR	YES REARFOTT NO	
FAILURE MODE-CONTANIMATIC ISPLACEMENT GTRO FAILED TO CORRECTIVE ACTION-FAILURE	FAILURE MODE-CONTAMINATION. DURING CAPCHE TESTING EIGHT MO-GOG WERE RECEIVED. DURING LIBORATORY YESTING THE PITCH D SPLACEMENT GYRO FAILED THE BITCTION TEST DUE TO A BMALL PIECE OF BOLDER IN THE PLOATATION FLUID. CORRECTIVE ACTION-FAILURE NOT COMFIRMED. REARPOIT IMPROVED QUALITY CONTROL IN THE FLOATATION FLUID AREA.	GO WERE RECEIVED. C CE OF BOLDER IN THE BURLITY CONTROL IN T	PLOATATION FLUIS HE PLOATATION FL	YELTIME THE PITCH D	
AUTOPILOT-ROUND-A-18 GYRO PACKAGE	AEGO-DBB7/FC-4CO-D1-DBB D13PLACEMENT 6730	COMPOSITE-FACTORY	96D PACTORY 801103	22	19200
FAILURE MODE-FAIL DURING OPERATION-AN AULTY YEST PROGRAMMER TAPES IN THE AGE.	DURING OPERATION-AN UMEXPECTED GYRO BIAS MAS PRESENT DURING A YAM GYRO TORGUING ENERCIZE DUE TO F	MAS PRESENT DURING /	YAN EYRO TORGUI	ING ENERCIZE DUE TO F	
TESTEM EFFECT-INFROMER ANALOG SIGNALS. VEHICLE EFFECT-COMPOSITE RE-SCHEDULED.	STRIEM EFFECT-IMPROPER ANALOG BIGNALS. Wemicle effect-composite re-scheduled. Partial couposite reites has perforhed.	TEST WAS PERFORMED.			
CORRECTIVE ACTION-THE AGI	CORRECTIVE ACTION-THE AGE TEST PROGRAMMER MAS REPLACED.				
AUTOPILOT-ROUND-A/B	AE60-0071/FC-5CO-02-011 RELAY	COMPOSITE-FACTORY	11E FACTORY \$01031	22	150658
FAILURE MODE-ERRATIC OPERATION. NG. THE YAM SIGNAL AMPLIFIER GRO.	FAILURE MODE-ERRATIC OPERATION. THE SANDORN RECORDING INDICATED AN ABSENCE OF MS. THE YAW SIGNAL AMPLIFIER GROUNDING RELAY (K414) IN THE AGE WAS DEPECTIVE. ANALEM STREETY-ESBATIC OPERATION.	<u>.</u>	ME YAN GYAO BIGH	THE YAN GYAO SIGNAL ANTLIFIER GROUNDS	
VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTING RESUIRED.	euired.			
CORRECTIVE ACTION-REPLACE	CORRECTIVE ACTION-REPLACED THE YAM SIGNAL AMPLIFIER GROUNDING RELAY IN THE AGE.	HE RELAY IN THE AGE.	_		
AUTOPILOT-ROMD-A/B	AE60-0671/FC-5CO-02-011 RELAY	COMPONITE-PACTORY	11E 001031	22	***************************************
FAILURE HODE-FAIL DURING FF DUE TO A DEFECTIVE AGE	. DURING OPERATION. THE GYRO BIAS PHASE MAS OPPOSITE TO THAT EXPECTED AT THE TIME OF SUSTAINER CUTO. TYE AGE BIAS PHASE RELAY, KTIE.	OPPOSITE TO THAT ET	IPECTED AT THE TI	INE OF BUSTAINER CUTO	
STATEM EFFECT-IMPROPER ANALOG SIGNALS.	ealos signals.				
VEHICLE EFFECT-COMPOSITE	VENICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTIMS REQUIRED.	QUIRED.			
COMMECTIVE ACTION-REPLACE	I-REPLACED AGE BIAS PHASE RELAY (KTIE).				

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18 JUN 1108

*************	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORME	PILOT STRTEM-AIRBOR!					٦
8787EN 848-8737EN	TEST/REPORT NUMBER PAILED COMPONENT NAME	BIF DATA BOURCE PART HUMMER	VEHICLE SITE PRI	817E		VENDOR NAME VENDOR PART NO	
AUTOFILOT-ROUND-A/B 67RO PACRAGE	AE60-0868/FC-4CG-01-085 Displacement 6780	COMPOSTIE: FACTORY	95D \$01010	FACTORY	♀ ♀		
FAILURE MODE-FAIL BURING E TO A FAULTY TAN AXIS MA	. DURING OPERATION-ALL MEGATIVE YAW DISPLACEMENT SYRO BIASING WAS 15 PCT BELOW POSITIVE BIASING, DU Axis malling amplifier, Buckout amplifier and isolation amplifier in TME AGE.	EMENT GYRO BIABING N NG ISOLATION AHPLIT	MS 15 PCT TER 1N TH	BELOW PO	¥11.4	E BIABING, D	
SYSTEM EFFECT-OPERATION TOO LOM.	,400 10%						Mandani''
WENICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE DELAYED. PARTIAL COMPOSITE RETEST WAS RESUIRED	AS REQUIRED.					
CORRECTIVE ACTION-THE YAN	CORRECTIVE ACTION-THE YAM AXIS MALLING AMPLIFIER, BUCKOUT AMPLIFIER AND ISOLATION AMPLIFIER IN THE AGE MERE REPLACE.	PLIFIER AND IBOLATI	ON AMPLEY	1 1 5	37 3	VERE REPLAC	. 1
AUTOPILOT-ROUND-A/B GYRO PACKAGE	98-04-119 67RO-RATE	FAR 7-41018-858	570 \$00922	Š	3 9		17.12.0
FAILURE MODE-SHORT (ELECT AILURE DUE TO SPIN MOTOR F	FAILURE MODE-SHORT (ELECT). DURING APCHE TESTING THE GYRO ASSEMBLY WAS REJECTED FOR A DEAD PITCH GYRO SPIN MOTOR. AILURE DUE TO SPIN MOTOR PLEX LEAD SHORT CIRCUIT TO SPIN MOTOR CONER CAP ASSEMBLY.	SSEMBLY WAS REJECTED OR CONER CAP ASSEMBL	FOT A DE	10 PITCH	6		<u> </u>
CORRECTIVE ACTION-(1) 676 OB SURVEYED AND REPLACED 1	CORRECTIVE ACTION-(1) GYRO VENDOR ELECTRICALLY INSULATED THE INSIDE OF OS SURVEYED AND REPLACED WITH UNITS INCORPORATING INSULATED COVER CAPS.	E INSIDE OF COVER CA	COVER CAP ASSEMBLY.	7. (E) AL	T 013	(E) ALL DISPLACENENT GYR	
LUTOFILOT-ROUND-A/B GTRO PACKAGE	AEGO-0643/FC-4CO-02-87 GYRO PACKAGE	COMPOSI TE-FACTORY	670 600816		₽ ₽	,	225660
FAILURE MODE-FAIL DURING MEM YAW COMMANDS WERE EXPE	FAILURE MOE-FAIL DURING OPERATION-UNE)PECTED PITCH BYEERING COMMANDS WENE INDICATED ON MIJNESTERN RECORDER MO. EH YAM COMMANDS WERE EXPECTED, AND YAW COMMANDS WERE APPARENT WHEN PITCH COMMANDS WERE EXPECTED.	F COMMANDS WENE INDI	CATED ON DS MERE E	NOVECTED.	N REC	*	3
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS.	MIDE SIGNALS.						
WEHICLE EFFECT-COUNTDOM	VEHICLE EFFECT COUNTDOMM, COMPOSITE DELAYED OR RESCHEDULED. POST COMPOSITE TESTING RESUIRED.	POST COMPOSITE TEST	INC REGUL	ė			
CORRECTIVE ACTION-FAULTY D.	CORRECTIVE ACTION-FAULTY MALTIVIBRATOR IN THE ACCELEROMETER REGISTER.	8	E AGE CHE	KOUT EAL	N N	FUIDANCE AGE CHECKOUT EQUIPMENT WAS REPAIRE	1
AUTOFILOT-ROUND-A/B GYRO PACKAGE	AEBO-0645/FC-4CO-01-07 BERNO AMPLIFIER	COMPOST TE-FACTORY	875 605811	FACTORY 153.2		5/S	
FAILURE MODE-FAIL DURING OF 1.E WULT AMPLITUDE FOR	OPERATION-BUSTAINER PITCH AND YAW PEEDBACK TRACES INDICATED AN UNEXPECTED EMBINE MOVEMENT Approximately 0.8 second duration.	PEEDBACK TRACES IND!	CATED AN	MEXPECT	3 8	INE HOVENENT	
SYSTEM EFFECT-IMPROPER ANALOS SISNALS.	MICO BIOMALS.						
WENICLE EFFECT-COMPOSITE	OMPOSITE PELAYED. POST-COMPOSITE TESTING MESUIRED.	eciato.					

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***	DIFFICULTER REVIEW-A	DIFFICIATIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	7		
TABTEM BUE-STATEM	TEST/REFORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DATE DIF	PRE VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION- MER	BERVO-AMPLIFIER INTEGRATOR PROGRAMMER WAS REMOVED, REMORRED, RETESTED AT COMPONENTS LEVEL, AND RE	MB REHOVED, REMORKED,	RETESTED AT COMPO	WENTS LEVEL, AND RE	******
AUTOFILOT-HOMB-A/B	99-04-161 DISPLACEMENT SYRO MOTOR	FAR 7-04830-1	600801 WTR	TES REARFOTT NO	******
FAILURE COE-CONTANTM AYION MIT 41:1 THE HYSTE	NIMATION. GYRO ASSEMBLY RETURNED BECAUSE OF AUDIBLE HOISE OPERATION. TWO GYROG EXHIBITED CONTAHIN STERESIS RING INSIDE GYRO SPIN HOTOR.	IE OF AUDIBLE HOISE OF	ERATION. THO GYROS	EXHIBITED CONTAMIN	
CORRECTIVE ACTION-YCA NING USED UNDEVER FEA RING AND STRIPPING PER NING CENCITED INSTEAD 18 RING LIQUED HONES I	VCAR TO KEARFOTT TO INTENSIFY THEIR EFFORTS TO INSURE (1) HELIUM USED IS PURE (2) ULTRASONIC CLEA FEASIBLE (3) FIXTURES ARE USED FOR BEARING LAPPING (4) STORASE DESSICATORS ARE USED (3) ALL SOLDE PERFORMED UNDER HOODS (8) SUBASSEMBLY OPERATIONS ARE SEGREGATED (7) BEARING END CAPS AND BELL HOU EAD OF SOLDERED (8) PARTS SUBJECTED TO CORROSION ARE NICKELPLATED INSTEAD OF PAINTED (9) (4YSTERES SINSTEAD OF MAY FINISHED. (10) BEARINGS ARE FREE OF CONTAMINATION AND SATURATED WITH LUBRICANT.	CRIS TO INSURE (1) HE SING LAPPING (4) STGRA PERATIONS ARE SECREGA CORROSION ARE NICKELP S ARE FREE OF CONTAMI	E (1) HELIUM USED IS PURE (2) ULTRASONIC CLE. STORAGE DESSICATORS ARE USED (3) ALL SOLD SECREGATED (7) BEARING END CAPS AND BELL HO NICXELPLATED INSTEAD OF PAINTED (8) :YRSTERE CONTANINATION AND SATURATED MITH LUBRICANT.	E (1) HELIUM USED 18 PURE (2) ULTRASONIC CLEA 1) STGRASE DESSICATORS ARE USED (3) ALL SOLDE SEGREGATED (7) BEARING END CAPS AND BELL HOW NICXELPLATED INSTEAD OF PAINTED (9) (YPSTERE) CONTAMINATION AND SATURATED WITH LUBRICANT.	
AUTOFILOT-ROUND-A/B GYRO PACKAGE	99-04-161 DISPLACEMENT GYRO BEARING	FAR 7-04250-1	600803 WTR	YES REARFOTT NO	*****
FAILURE MODE-STRUTTUR ER DUE TO CWERHEATING	FAILURE HODE-STRUTURAL. GYRO ASSEMBLY RETURNED BECAUSE OF AUDIBLE NOISE OPCRATION. GYRO HAD A SPLIT BEARING RETAIN A DUE TO CWERHEATIES CAUSED BY LACK OF LUBRICANT.	F ALDIBLE NOISE OPCHA	TION. GYRO HAB A SA	LIT BEARING RETAIN	
CORRECTIVE ACTION-VCA 6 13 USED WHEREVER FEA AMD STRIPPING 18 PERFO 8 CEMENTER INSTEAD OF LIBUID HOMED INSTEAD	CORRECTIVE ACTION-VCAR TO KEARFOIT TO INTENSIFY THEIR EFFORTS TO ENSURE (1)HELIUM USED IS PURE(2)ULTRASONIC CLEANIN 6. IS USED WHEREVER FEASIBLE(3)FIXTURES ARE USED FOR BEARING LAPPING, (4)STORACE DESSICATORS ARE USED(5)ALL SINDERING AND STRIPPING IS PERFORMED UNDER MODOS 18)SUB-ASSEMBLY OPERATIONS ARE SEGREGATED(7)BEARING END CAPS AND BELL MOUSTING B. CEMENTER INSTEAD OF SOLDERED (6)PARTS SUBJECTED TO CORROSION ARE NICKELPLATED INSTEAD OF PAINTED(9)HYSTERESIS RING LIBUID MOWED INSTEAD OF MAT FINISHED(10)PEARINGS ARE FREE OF CONTANINANT AND SATURATED WITH LUBRICANT.	CRIS IC ENSURE (1) HEL G LAPPING, (4) STORACE RATIONS ARE SEGREGATE MION ARE NICKELPLATED OF CONTAMINANT AND S	IUM USED IS PURE(E) DESSICATCAS ARE USE D(7) BEARING END CAP INSTEAD OF PAINTE ATURATED WITH LUBAR	ULTRASONIC CLEANING DELL SEDERING S AND BELL MOUSING (9)HYSTERESIS RING CCANT.	
AUTOFILOY-ROUND-A/B GYRO PACKAGE	BF-89-04-3373F DIEFLACEMENT 6YRO MOTOR	FAR 7-04250-3	124D FACTORY 600730	YES REARFUTT NO	50710
FAILURE MODE-ELECTRIC. ASE FLEX LEAD. IT MAS	FAILURE MODE-ELECTRICAL OPEN. GYRO WAS IR/D FOR MAVING MO OUTPUT. FAILURE WAS CONFIRMED AND TRACED TO A BROKEN A-PH 18E PLEX LEAD. IT HAS BEEN DETERMIMED THAT DISTORTED FLEX LEADS IS LINKED TO EVENTUAL PLEXLEAD BREAKAGE.	CUTPUT, PAILURE MAS LEADS IS LINKED TO EV	CONFIRMED AND TRACE	ED TO A BROKEN A-PH	
CORRECTIVE ACTION-6D/C ES NEAR FLEX LEADS TO W SOSS DATED ED MARCH 63.	60/C INCORPORATED NEW HANGLING REQUIRENENTS INTO APPLICABLE PROCEDURES. GYROS NOW MADE WITH BAFFL. TO MINIMIZE THE FLOW OF THE ALMOST SOLID PLOTATION MATERIAL DURING COOLDOMN. REF 60/A NEWO 336-E-+83.	ENTS INTO APPLICABLE D PLOTATION MATERIAL	PROCEDURES. 67ROS I DURING COGLDOMN. RE	PROCEDURES. SYROS NOW MADE WITH BAPPL. DURING COOLDOMN. REF 5D/A NEWO SSS-E-	
				PAGE GOSS	

GENERAL DYNAMICS CONVAIR DIVISION

	15 JUN 1848	DIFFICULTIES REVIEW-AUTOFILOT STREM-AIRBORME	PILOT SYSTEM-AIRBORI	¥		Ì		
	8787EX 8UB-8787EX	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	117E 01F	= X 0	VENDOR NAME.	
	AUTOFILOT-ROMD-A/B	AEGG-DG3G/B1-401-00-74 PITCH DISPLACEMENT SYRO SPIN HOTOR	ruent	740 6007£2	- T	YES 7	KEARFOTT	****
	FAILURE MODE-FAIL DURING	IL DURING OPERATION. ABNORMALLY HIGH PITCHOVER POSSIBLY DUE TO LOW PITCH DISPLACEMENT GYRO SPIN HOTO	IN POSSIBLY DUE TO I	ON PITCH	DI SPLACEN	ENT	THO SPIN MOTO	
	SYSTEM EFFECT-OPERATION WHICE EFFECT-LOSS OF W	SYSTEM EFFECT-OPERATION TO MIGM-VEHICLE PITCH RATE WAS TOO HIGH. VEHICLE EFFECT-LOSS OF VEHICLE STABILITY, PITCH OVER RATE OF HISSILE EXCESSIVE (SO PERCENT HIGH) WHICH RESULTED IN	HIGH. F MIBSILE EXCESSIVE	(69 PERCE	74 H (%)	<u>0</u>	AESULTED IN	
	BELF DESTRUCT AT 68 SECONDS. CORRECTIVE ACTION-VENDOR INEAR ON INSTALLED ON LATER VEHICLES PREVENT SHORTING OF SPIN HOTOR	SECONDS. ON-VENDOR (REARFOTT) TO INVESTIGATE THEIR PROCESSES REGARDING GTAO MFG. AND TEST. SPIH MOTOR DETECTS LATER VEHICLES TO ASSURE ADEQUALE SPIN MOTOR SPEED AT LIFTOFF. THE SPIN MOTOR CASE WAS INSULATED TO F SPIN MOTOR LEADS.	OCESNES REGARDING 6' SPEED AT LIFTOFF.	NO ME. A	NO TEST.	1 3	HOTOR DETECTI INSULATED TO	
	AUTOPILOT-FOUND-A/B	AE60-5636/81-401-00-74 TORGUER AMPLIFIER	PLIGHT	740 600722	- B - E	7E\$ 1	YES KEARFOTT YES	150300
	FAILURE MODE-FAILED DUR! M ERROR.	ILED DURING OPERATION. ABNORMALLY HIGH TORQUER AMPLIFIER GAIN DUE TO COMPONENT FAILURE OR CALIBRATIO	ER AMPLIFIER GAIN D	AE TO COM	OMENT FAI	95	OR CALIBRATIO	
	SYSTEM EFFECT-OPERATION VEHICLE EFFECT-LOSS OF V ER RATE FROM LIFTOFF TO S	BYBIEN EFFECT-OPERATION TOO HIGH. VEHICLE PITCH RATE WAS TOO HIGH. VEHICLE EFFECT-LOBS OF VEHICLE STABILITY. PITCH OVER RATE OF MISSILE EXCESSIVE. AN AVERAGE 69 PERCENT HIGH PITCH OV ER RATE FROM LIFTOFF TO SELF DESTRUCT AT 69 SECONDS.	O HISSILE EXCESSIVE	AN AVERA	2 2 JC	CENT	HIGH PLICH OV	
	CORRECTIVE ACTION-RE-INS RMEY AT VAFB. REVIEW PROC CE OTHER THAN SUPPLY DEPO	CCRRECTIVE ACTION-RE-INSPECTION AND RETEBTING OF ALL GYROS AND SERVO CANISTERS ASSOCIATED WITH OPERATION GOLDEN JOU RACY AT VARB. REVIEW PROCEDUMES ON OPERATION OF GYROS, ISSUANCE OF 1-6. TO PREVENT TAILORING GYRO PACKAGE AT ANY PLACE OTHER THAN SUPPLY DEPOT. VENDOR, KEARFOTT TO INVESTIGATE THEIR PROCESSES REGARDING GYRO MANUFACTURE AND TEST.	AND SERVO CANISTERS NICE OF 1.63. TO PHEN HELE ARCESSES REGI	ASSOCIATE	D MITH OF THE EYRO O HANGEAG	PACE	ION GOLDEN JOU LEE AT ANY PLA AND TEST.	
	AUTCELLOT-ROUND-A/B EVRO PACKAGE	90-04-093 AMPLIFIER-GAIN/TRAMSFORNER	FAR T-41015-919	330 800764	MT.	7 Q	5/g	*****
		FAILURE MODE-OUT OF TOLERANCE. DURING CAPCHE TESTS PITCH CHANNEL GAIN WAS OUT OF SPECIFICATION LIMITS. YAW AMPLIFIE R GAIN WAS 30 PER CENT BELOW SPECIFICATION LIMITS. PITCH CHANNEL DISCREPANCY HAS DUE TO DRIFT. THE YAW CHANNEL DISCR EPANCY HAS DUE TO A SHORT IN TRANSFORMER TI.	AMEL GAIN WAS OUT O	SF SPECIFI	CATION LI	47.74 4.74	, YAW AMPLIFIE CHANNEL DISCR	
	CORRECTIVE ACTION-67RO DI VENDOR REQUESTED TO DO TH	CORRECTIVE ACTION-6780 DESIGN CHANGED TO RESUINE 1 PER CENT PRECISICI RESISTORS IN THE GAIN TRIMMING CIRCUIT. SYRO ENDOR RESUESTED TO DO THE SAME IN THE GYRO HEATER SENSOR AND THE PHASE ANCLE TRIMMING CIRCUIT.	PRECISION RESISTOR	THE THE	AIN TREM	2	CIRCUIT. SYRO	
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SENERAL DYNAMICS CONVAIR DIVIBION

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48 JUN 1946	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	OPILOT SYSTEM-AIRSON	¥			_
BYSTEN SUB-SYSTEN	TEST/REPORT NUMBER FAILED COMPONENT MANE	DIF DATA BOUNCE PART NUMBER	VEHICLE B	SITE PRI	VENDOR MANE	
AUTOFILOT-ROMD-A/B GTRO PACKAGE	AB-04-118 67RO-RATE	FAR 7-04230-£	BODEES FAC	FACTORY YES	YES KEARFOTT NO	
FAILURE MODE-OUT OF BI	SPECIFICATION, DURING FACTORY CHECKOUT GYRO OPERATED AT 12000 RPH INSTEAD OF 24000 RPM.	GYRO OPERATED AT LE	000 RPM IMBTE/	9	30 aPt.	
CORRECTIVE ACTION- VEN	VENDOR HAS CHANGED CLEANING PROCESS AND INCREASED SEARING RETAINER PORCESTY	INCREASED SEARING RE	TAINER PORCE!	٠.		
AUTGPILGT-ROUND-A/B GYRO PACKAGE	AZM-ET-467/FC-4CO-03-3E-ADDENDUM TORGUIMG AMPLIFIER	COMPOSITE-PACTORY	325 FAC	FACTORY NO		****
FATLURE HODE-OUT OF THE CONDITION HAS CAUSED	FAILURE MODE-OUT OF TOLERANCE, THE RECORDING JEDICATED YAW GYRO TORQUING RATES TO BE S CONDITION WAS CAUSED BY A DEFECTIVE YAW GYRO BUCKOUT AMPLIFIER LOCATED IN 68E.	FIER LOCATED IN GAR	70 PE	0 PC1 A8	64 TO TO PCT ABONE HORMAL. THE	
SYSTEM EFFECT-OFERATION	SYSTEM EFFECT-OFERATION TGS HIGH-TORNUING RATES WENE TOO HIGH BUE TO FAULTY BUCKOUT AMPLIFIER IN 68E.	ICH DUE TO FAULTY BL	CKOUT AMPLIFIE	363 MI K	.•	
WENTELE EFFECT-COMPOS	WEMICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TEST MADE TO SHOW PROPER TORGUING RATES.	TO SHOW PROPER TORG	UING RATES.			· · · · · · · · · · · · · · · · · · ·
CORRECTIVE ACTION-FAU	FAILTY ANTIFIER REPLACED.					
AUTOPILOT-ROUND-A/B	98-04-070 AMPLIFIER	FAR 7-41015-939	800521 ETR	2 2	y 9	****
FAILURE MODE-OUT OF TO	FAILURE MODE-OUT OF TOLERANCE-DURING TESTING ON THE CONTROLS GTRO CHECKOUT SET THE PITCH DISPLACEMENT AND THE PITCH RATE GAIN WAS LOW, AMPLIFIER 7-41906-5 WAS DEFECTIVE DUE TO OVERHEATING.	CA GYRO CHECKOUT BET O OVERHEATING.	THE PITCH DI	PLACENES	IT AND THE PITCH	
COMPECTIVE ACTION-ROW	HONE-FAILURE BELIEVED DUE TO INADVERTENT	TO INADVERTENT APPLICATION OF HIGH VOLTAGE TO CUTPUT OF AMPLIFIER.	WOLTAGE TO OF	Po Turti	AMPLIFIER.	
AUTOFILOT-ROUND-A/B GYRO PACKAGE	88-04-113 RATE GYRO SPIN HOTOR COVER	FAR 7-04250-1	6003E6 ETR	ž Š	YES KEARFOTT NO	094403
FAILURE MODE-SHORT DE STATOR MINDING, ÉYRO	DEVERTING IN ABLIEG OF BIATOR, ATTRIBUTED TO INSUFFICIENT CLEARANCE BETWEEN SPIN NOTOR COWER AND RO SPL BELOW SPECIFICATION AND DREW EXCESSIVE CURRENT	ED TO INSUFFICIENT (CESSIVE CURRENT,	LEARANCE BETW	N 100 N 31	NOTOR COVER AND	
CORRECTIVE ACTION-VEN	VENDOR INCREARED CLEARANCE BY 0.10 INCH.	маницинальная в передерентей на пределений пределений пределений пределений пределений пределений пределений п				

GENERAL DYMANICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-ATRBORNE

STSTEM SUB-STSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF CATA BOUNCE PART NUMBER	VEHICLE DATE OIF	817E 76ME 08F	PRI VENDOR HANE OTH VENDOR PART NO	MANE ART NO	
AUTOPILOT-ROMB-A/B PTRO PACRAGE	9D-04-077 67RO-DI 3PLACENENT	FAR 7-41015-919	6005E1	£ .	7E &	arm s ilinin a	26226
FAILURE MODE-OUT OF TOLERANCE WERE ABOVE SPECIFICATION TOLE THERE WAS A DEFECTIVE LEAD IN	FAILURE MODE-OUT OF TOLERANCE-DURING CONTROL GYROS TEST THE PITCH CHANNEL DISPLACEMENT GAIN AND WERE ABOVE SPECIFICATION TOLERANCES. YAW DISPLACEMENT GYRO SPIN MOTOR COVER WAS SHORT CIRCUITED HERE WAS A DEFECTIVE LEAD IN WIRE SOLDER JOINT.	PITCH CHANNEL DISPI BPIN HOTOR COVER UM	ACEMENT GA		AVERAGE BENSITIVITY TO THE STATOR, AND	410117	
CORRECTIVE ACTION-STATOR END TED ON ALL STATORS TO CULL OUT PECTION TECHNIQUES. MICROSOPIO	END TURN DINENSIONAL TOLERANCE HAS BEEN REDUCED BY 0.010 INCHES. OVERVOLTAGE TESTS INSTITU L OUT DEFECTIVE STATOR ASSENBLIES. INSTITUTED A TRAINING PROGRAM IN PROPER ASSENBLY AND INS SOPIC INSPECTION OF INCOMING WINDING WIRE INITIATED.	BEEN REDUCED BY 0.0 INSTITUTED A TRAINIG G WIRE INITIATED.	310 INCHES.	OVERVOL	TACE TESTS I	INSTITU AND INS	
AUTOFILOT-ROMB-A/B FYRO PACKAGE	AE60-043E/8E-401-00-£3 67RO-013PLACEMENT	FL16H7 7-04230-1	\$0500 9	. .0	YES HO		993935
FAILURE MOE-SHORT-ELECTRICAL O CASE AND BURNED THROUGH.	RICAL, ONE OF THREE PLEX LEADS TO THE PLICH DISPLACEMENT GYRO SPIN MOTOR.	HE PITCH DISPLACDE	47 GTRO SP)	IN NOTOR	SHORTED TO THE GYR	HE SYR	
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS. S TAO GUTPUT IN RESPONSE TO HISSILE HOTION.	MALOG SIGMALS. SHORTED LEAD RENDERED HISSILE HOTTON.	D SPIN MOTOR INDPERATIVE PRECLUDING PITCH DISPLACEMENT	NTIVE PRECI	.wo1%c	ITCH BISPLACE	HENT G	
VEHICLE EFFECT-LOSS OF VEHICL DS.	DHICLE STABILITY. RESULTING IN DESTRUCTION OF VEHICLE BY	RUCTION OF VEHICLE	SY RANGE &	VFETY OF	RANGE SAFETY OFFICER AT 25.6 SECON	SECON	
CORRECTIVE ACTION-191N HOTOR	DTOR LEADS INSULATED FROM GYRO PACKAGE COVER IN THE SUFFIX D GYRO CHANGE.	AGE COVER IN THE BU	FFIX D GYR	CHANGE	•		
AUTOPILOT-ROUND-A/B GTRO PACKAGE	89-24-098 Rate Gtro.	FAR 7-04250-1	827009	ETR	YES 60/C NO		98488
FAILURE HODE-CONTANIMATION. D HISTERESIS RIME MAS RUSTY.	OH. GYRO WAS RENOVED FROM ASSEMBLY BECAUSE IT WAS EMITTING A LOUD AUDIBLE NOISE. BEARING AM TY.	BECAUSE IT WAS ENIT	TING A LOU	AUDIEU	E NOISE. BEAI	II NE VH	
CORRECTIVE ACTION-VCAR TO KEARFO E PRACTICABLE. (3). USE FIXTURE I PPING AND SOLDERING UNDER HOMDS. OF SOLDER FOR HOUSING ASSENBLY.	OTT TO- (1) ENSU FOR BEARING LAPP (6), PERFORM AS (6), PLATE ALL	RE PURITY AND DEW POINT OF HELI ING OPERATION. (4). USE STORAGE SEMBLY OPERATION IN PRESSURIZED FARTS SUBCEPTABLE TO CORROSION.	OF HELIUM. (E). USE U STORAGE DESSIGATORS. SURIZED CLEAN ROOM. (ROSIOM.	SE ULTRA RS. (5). M. (7).	LIRASONIC CLZANING MER (S). PERFORM MIREE STRI 7). USE CEMENT IN PLACE	UG WHER EE STRI W PLACE	
AUTOPILOT-ROUND-A/B GTRO PACKAGE	ed-04-069 byro-dibplacement	FAR 7-41016-919	570 600416	R LL	22		
FAILURE MODE-OUT OF TOLERANCE-PITCH E. THE FACTORY CALIBRATION VOLTHETCA	AND YAM EYRO OUTPUT USED FOU SETTING UP	WAS OUT OF TOLERANCE DURING AN APCHE RUM. NOT A GTRO FA THE GYRO AMPLIFIER GAINS EXHIBITED HIGH INHERENT DRIFT.	URING AN A NS EXHIBIT	FCME RUN	. NOT A GTRO IMMERENT DRI	erro Fastur I Drift.	

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GENERAL DYNAMICS CONVAIR BIVISION

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

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VENDOR MANE VENDOR PART NO			IATED INTERNI THE MIRE IND	TO INCLUDE		BY AN INTERN ER 1959. E WERE RETROF			GAIN, DURING			TEERING COMMA	ING THE GUIDA	
1 0 N		2 2	TER OPE ID OVER	, VENDO	45 č	CAUSED BEPTED BA		22	AW GTRO		YES NO	DANCE 8	OVERID	
SITE TIME DIF		WTR	INC HEAT	1. ALBO,	Cir	FAILURE SLE 12 1		A F	T 71:E Y.		18	100 9H1	NEW O	
VEHICLE DATE DIF		57D 600415	NT GYRO, FI	ER CONTROL	600407	D TESTING. I BE UNKELIA MS POTTED		6 0040 2	45 WERE THA NCE.		55D 600329	ASER INVOLV	T00 H2 EH AN	
DIF DATA SOURCE PART NUMBER		FAR 7-41015-919	TEN THE YAW DISPLACENE T AND LEADIN WIRE WAS	TECHNIQUE ON GYRO HEATER CONTROLS. ALSO, VENDOR TO INCLUDE	FAR 7-41015-919	RATE GYRO GUTPUT INTERNITTENT DURING GYRO TESTING, FAILURE CAUSED BY AN I GYRO. STYCAST 2002 COMPOUND MAS FOUND TO BE UMBELIABLE 113 SEPTEMBER 1950.		FAR 7-41013-919	OUT FAILURE INDICATION LIGHTLY OUT OF TOLERAN	,	COMPOSITE-B FACT	LOOP TEST FOR ALL PM	IFIER SAINS MERE SET	
TEST/REPORT MUSER FAILED COMPONENT MANK	RY VOLTHETER REPLACED.	90-04-071 Gyro-displacement/Heater-fine	FAILURE MODE-ERRATIC OPERATION-DURING TESTING OF THE SYSTEM THE YAW DISPLACEMENT GYRO, FINE MEATER OPERATED INTERNI TTENTLY. THE COMECTION BETWEEN THE HEATER SENSING ELEMENT AND LEADIN WIRE MAS FOUND TO BE CRIMPED OVER THE MRE ULATION, MAKING ONLY PARTIAL CONTACT.	CORRECTIVE ACTION- VCAR TO GYRO VENDOR TO IMPROVE WIRING TECHNIAUE CLOSER INSPECTION PROCEDURE.	98-04-066 6770-481E	FAILURE MODE-ERRATIC OPERATION-PITCH RATE GYRO CUTPUT INTERHITTENT DURING GYRO TESTING, FAILURE CAUSED BY AN INTERN TIENT OPEN CIRCUIT IN THE PITCH RATE GYRO. STYCAST 2862 COMPOUND WAS FOUND TO BE UMBELIABLE IN BEPTENBER 1959. CORRECTIVE ACTION-ALL GYRO PACKAGES CONTAINING RATE GYROS WITH SIGNAL GENERATORS POTTED IN STYCAST 2862 WERE RETROF		98-04-068 GYRO-D1 SPLACENENT	FAILURE MODE-OUT OF TOLERANCE-DURING APCHE DECK 37 CHECKOUT FAILURE INDICATIONS WERE THAT THE YAW GYRO GAIN, DURING TORBUING TESTA, MAS 30 PER CENT LOW AND PITCH GAIN WAS BLIGHTLY OUT OF TOLERANCE.	PROBLEMS CLEARED UP.	AA60-0150/PE-4CO-01-55 MULLING AMPLIFIER	FAILURE MODE-OUT OF TOLERANCE, AUTOPILOT DID NOT SATISFY LOOP TEST FOR ALL PHASES INVOLVING GUIDANCE STEERING COMMA De secause gyro mulling amplifier gains nere set too high.	ststem eppect-improper amalog sigmals. Gtro mullimg amplipier gains mere set too high and mere overriding the guida Ce torguing voltages.	
816-878TEM	CORRECTIVE ACTION-PACTORY VOLTHETER REPLACED.	AUTOPILOT-ROMD-A/B	FAILURE MODE-ERRATIC OPERATION-DURIN TTENTLY. THE COMMECTION BETWEEN THE H ULATION, MAKING ONLY PARTIAL CONTACT.	CORRECTIVE ACTION-VCAR T	AUTOPILOT-ROAD-A/B GTRO PACKAGE	FAILURE MODE-ERRATIC OPERATION-PITCH ITTENT OPEN CIRCUIT IN THE PITCH RATE CORRECTIVE ACTION-ALL 6780 PACKAGES (ITTED.	AUTOFILOT-ROUND-A/B GYRO PACKASE	FAILURE MODE-OUT OF TOLE TORAUIMG TESTS, MAS 30 P	CORRECTIVE ACTION-APCHE PROBLEMS CLEARED UP.	AUTOFILOT-ROUND-A/B SYRO PACKASE	FAILURE MODE-OUT OF TOLERANCE, AUTOFILOT DID NOS BECAUSE GYRO MULLING AMPLIFIER GAINS WERE	SYSTEM EFFECT-IMPROPER A MCE TORGUING VOLTAGES.	

GENERAL DYNAHICS CONVAIR DIVISION

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DIPFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

L	**************************************	TEST/REPORT NUMBER	DIF DATA SOURCE	VEHICLE	11 12 01 1	2 2	VENDOR MANE	[<u> </u>	
	80	TE DELAYED ONE HOUR.							:
		ING ANPLIFIER GAINS WERE REBET AFTER THE FACT TEBT.	THE FACT TEST.						
	AUTOFILOT-ROUND-A/B ETRO PACKAGE	AEGG-0239/FC-4CO-01-61 FITCH BUCKOUT AMPLIFIER	COMPOSITE-FACTORY	610	FACTORY	₹ ₹		•	:
	FAILURE MODE-OUT OF TOLE S BEING DRIVEN TO THEIR P N THE PITCH PROGRAM.	FAILURE MODE-OUT OF TOLERANCE, THE BUCKOUT AMPLIFIER WAS NOT PROPERLY AGJUSTED. THIS RESULTED IN THE BOOSTER ENGINE SEING DRIVEN TO THEIR POSITIVE PITCH LIMITS. WHEN THE GYROS MERE GROUNDED, VARIATIONS WERE GREATER THAN EXPECTED O I THE PITCH PROGRAM.	OT PROPERLY AGJUSTED. THIS RESULTED IN THE BOOSTER ENGINE OS MERE GROUNDED, VARIATIONS WERE GREATER THAN EXPECTED O	. THIS RES	IULTED IN ÆRE GREAT	THE 1	BOOSTER ENG HAN EXPECTE	¥°	
	SYSTEM EFFECT-OPERATION	SYSTEM EFFECT-OPERATION TOO HIGH. MISADJUSTED PITCH BUCKOUT AMPLIFIER CAUSED ENGINES TO 60 TO THEIR LIMIT	T AMPLIFIER CAUSED E	NGINES TO	5 TH	13 K	IMIT.		
	WENICLE EFFECT-COMPOSITE DELAYED. R OPERATION.	DELAYED. AFTER PITCH BUCKOUT AMPLIFIER WAS ADJUSTED.		A FIX AUN	MAS HADE	ij.	A FIX RUN MAS MADE WHICH SHOWED PROPE	u k	
	CORRECTIVE ACTION-THE AG	AGE PITCH BUCKOUT AMPLIFIER WAS READJUSTED.	JUSTED.						
<u> </u>	AUTOFILOT-ROIND-A/B GYNO PACKAGE	98-04-027 67ro-018placenent	FAR 7-41015-919	260 600227	ETR	YES NO		869828	es en
	FAILURE MODE-OPEN (ELECT CEMENT GTRO TORQUED EXCES	FAILURE MODE-OPEN (ELECT). FINE HEATER CONTROL CIRCUIT OPEN, CAUSING FINE HEATER CONTINUOUS OPERATION. PITCH DISPLA CENENT GYRO TORQUED EXCESSIVELY DUE TO OVERHEATED DAMPENING OIL.	N, CAUSING FINE HEAT	ER CONTIN	JOUS OPER	8	. PITCH DIS	.	
	CORRECTIVE ACTION-VENDOR	CORRECTIVE ACTION-VENDOR IMPROVED NAMIFACTURING TECHNIQUES AND INSPECTION PROCEDURES.	AND INSPECTION PROC	EDURES.					
	AUTOPILOT-ROUND-A/B	AE60-0198/FC-4CO-01-35 AMPLIFIER	COMPOST TE-FACTORY	550 600217	FACTORY	22		097464	3
	FAILURE HODE-OUT OF TOLE GIMES TO BE DRIVEN TO THE	FAILURE HODE-OUT OF TOLERANCE-THE AGE PITCH BUCKOUT AMPLIFIER WAS NOT PROPERLY ABJUSTED. THIS CAUSED THE BOOSTER EN GINES TO BE DRIVEN TO THEIR POSITIVE PITCH LIMITS-DURING THE PITCH PROGRAM.	IER WAS NOT PROPERLY NE PITCH PROGRAM.	/ ADJUSTED	. THIS CA	USED	THE BOOSTER	Z	
	SYSTEM EFFECT-IMPROPER A	AMALOG SIGNALS.		7					
	VEHICLE EFFECT-COMPOSITE	TE RESCHEDILED.							
	CORRECTIVE ACTION-PITCH	CORRECTIVE ACTION-PITCH BUCKOUT AMPLIFIER RESDIUSTED. POST COMPOSITE TESTING REQUIRED.	COMPOSITE TESTING	REQUIRED.					
<u> </u>	AUTOFILOT-ROUND-A/B GYRO FACKAGE	98-04-034	FAR 7-41015-817	290 600100	ETR	₹			
7	FAILURE MODE-OUT OF SPEC EST. ANALYSIS AT SO INDIC SCATION,	FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE-EVRO PACKAGE WAS REJECTED AT ETR MHEN TESTED CA CONTROLS MANEUVERS T Est. AMALYSIS AT SD IMDICATED THAT THE GYRO PACKAGE MAS IN SPECIFICATION AND THAT THE ETR TEST SET MAS OUT OF SPECIF ICATION.	HE WAS REJECTED AT ET SPECIFICATION AND TO	TR WEN TE	STED CAC	ON THE	OLS MANEUVER	SPECIF	

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GENERAL DYNAMICS CONVAIR DIVISION

2 4 CM 1868	DIFFICULTIES REVIEW-AUTOPILOT	DPILOT SYSTEM-AIRBORNE	¥			
STATEM BUD-STATEM	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE BITE DATE DATE DATE DATE DATE DATE DATE DA	17E PR1	VENDOR NAME VENDOR PART NO	
	-ETR CONTROLS MANEUVER TEST SET REPLACED.					•
AUTOFILOT-ROUND -A/B GYRG PACKAGE	A2M-27-427/FC-4CO-01-46 AMPLEFIER	COMPOSITE-PACTORY	46D FAC 591119	FACTORY NO NO	Andrewskinskinskinskinskinskinskinskinskinskin	*****
FAILURE MODE-OUT OF TOI T AMPLIFIER IN 69E.	OF TOLERANCE-BOOSTER ENGINE VENT TO LIMIT DURING PITCH PROGRAM. CAUSED BY MIBADJUSTED PITCH BUCKOU.	DURING PITCH PROGRA	M. CAUSED SY	HI BADJUBTI	D PITCH BUCKOU	·
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS.	ANALOG SIGNALS.					
WEHICLE EFFECT-COMPOSI		£.			:	
CORRECTIVE ACTION-PROCI	CORRECTIVE ACTION-PROCEDURE CHANGED TO REGUIRE A GRE PITCH	GAE PITCH BUCKOUT AMPLIFIER ADJUSTMENT. COMPOSITE RENAM.	DJUSTHERIT. CO	POSITE RI	XAM.	
AUTOFILOT-ROUND-A/B GYRO PACKAGE	AZM-27-407/FC-4CO-0E-43 67RO-013PLACEMENT	COMPOST TE-FACTORY	43D FAC 391110	FACTORY NO		******
FAILURE HODE-OUT OF TO H ETRO OUTPUT MAS UNGRO	OF TOLERANCE-BOOSTER EHGINE WENT TO THE MECHANICAL SIOP DURING THE PITCH PROGRAM WHENEVER THE PITC UNGROUNDED. THIS WAS CAUSED BY THE PITCH BUCKOUT AMPLIFIER IN THE AGE BEING OUT OF ADJUSTMENT.	ECHAHIGAL BYOF DURIN BUCKOUT AMPLIFIER IN	G THE PITCH P	C OUT OF	MEYER THE PITC IDJUSTHENT.	والمراجع وا
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS	ANALOG SIGNALS.					
VEHICLE EFFECT-COMPAY	VEHICLE EFFECT-COMPAGITE MESCHEDULED. BOOSTER ENGINES MENT TO LIMIT DURING PITCH PROGRAM.	TO LIMIT DURING PIT	си реобели.			
CORRECTIVE ACTION-BUCKOUT AUPLIFIER IN AGE	OUT AUPLIFIER IN AGE PE-ADJUSTED.					
AUTOFILOT-ROADS-A/B GYRO PACKAGE	88-04-023 AMPLIFIER	FAR 7-41015-887	Secess ETR	ž Q	5/05	*****
FAILURE MODE-OPEN (ELE	(ELECT)-TERMINAL 38 OF AMPLIFICA AR-154 BROKEN OFF. PITCH BUMMING CIRCUIT OFEN.	BROKEN OFF. PITCH BL	MING CIRCUIT	OFEN.		
CORRECTIVE ACTION-INSP N OF PVT.	CORRECTIVE ACTION-INSPECTION OF ELECTRONIC ASSEMBLIES TIGHTENED. GYRO PACKAGES OPENED FOR INSPECTION UPON COMPLETIO 1 OF PYT.	TEMED. GYRO PACKAGE!	OPENED FOR 1	NSPECTION	UPON COMPLETIO	
AUTOFILOT-ROUND-A/B GYRO PACKAGE	AZH-27-815/7C-4CO-C5-28	COMPOSITE-PACTORY	240 590823	PACTORY NO	3/09	
FAILURE WODE-CONTABINA MED SYRO GROUNDING.	AMINATION. DIRTY TEST PROGRAMMER TAPES CAUSED FAILURE OF THE BOOSTER ENSINES TO RESPOND TO PROGRAM	UNED FAILURE OF THE	B-JOSTER ENSIN	ES TO NES	POND 14 PROGRAM	
SYSTEM EFFECT-IMPROPER	BYBTEM EPPECT-IMPROMER DIBCRETE BIGMALB. DIRTY PROGRAMMING TAPES CAUSED PREM-TURE VECO.	TAPES CAUSED PREM.	WE VECO.			
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CONVAIR DIVISION

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9941 W/ 51	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TOPILOT SYSTEM-AIRBON	¥			•	
8787EH 848-878TEH	TEST/REPORT MUMBER FAILED COMPONENT MANE	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	81TC TIME DIF	PR I	VENDOR SAME VENDOR PART NO	
WONICLE EFFECT-CUMOBINE	NE DELAYED OR RESCHEDILED. RENUN OF COMPOSITE MADE.	CONFOSTITE MADE.					*****
CCRECTIVE ACTION-TEST TA	TAPES CLEANED. RE-RUN SATISFACTORY.						
ANTOFILOT-ROMD-A/B GTRO PACKASE	FTA5016/PE-305-00-06 67RO-PITCH RATE	COUNTDOM	8C 390718	=	5 S		*5 8 2 8 8
FAILURE MODE-FAIL DURING THO MAD NO CUTPUT.	M OPERATION. DURING PRE-COUNT OPERATIONS, THE RATE GYRO TEST INDICATED THAT THE PITCH RATE	ATIONS, THE RATE GYRO	TEST 11001	SATED TH	F .	E PITCH RATE 6	
SYSTEM EFFECT-OFFIATION D	I BOES NOT START.						
VENICLE EFFECT-HOME.							
CORRECTIVE ACTION-A NEW	CORRECTIVE ACTION-A NEW GYRO CANNISTER WAS INSTALLED.						
AUTOFILOT-ROUGHAND	AZH-ET-EST/FC-4CG-01-E1 ROLL DISPLACDENT 67RO	COMPOSITE-FACTORY	21D 590522	FACTORY	ž č	•	696363
FAILURE MOE-FAIL DURING	G OPERATION THE ROLL DISPLACEMENT GYRO EXHIBITED SLOW RESPONSE TO MALLING SIGNALS.	F CYPO EXMIBITED SLOW	/ RESPONSE	TO MULLE	\$6 51	GNAL 8.	
SYSTEM EFFECT-INFROPER	SYSTEM EFFECT-INFROPER AMALOG SIGMALS-GYRO GUTPUT IMPROPER DUE TO SLOW RESPONSE.	R DUE TO SLOW RESPONS	į				
WENICLE EFFECT-CONFOSITE	E RESCHEDULED. COMPOSITE RETEST PERFORMED.	ROTHED.					
CORRECTIVE ACTION-67BO CA	CANISTER REPLACED.						
AUTOFILOT-ROUND-A/B GTRO PACKAGE	FTA4890/PE-301-00-D6		6C 590522	ETA	ž č		***************************************
FAILURE MODE-OUT OF TOL TH LANDLINE DATA.	FAILURE MODE-OUT OF TOLERANCE. ROLL RATE GYRO BIGNAL AMPLIFIER DATA APPEARED QUESTIONABLE. TELENETRY DATA AGREED WI H LANCLINE DATA.	IFIER DATA APPEARED (UESTIONABI	E. TELEM	ETRY	DATA AGREED WI	
STSTEM EFFECT-INFROPER ANALOG SIGNALS	AMALOG SIGNALS.	·					
WENTELE EFFECT-NONE.							
CORRECTIVE ACTION-AMPLIFI	FIERS HO.12 AND 18 IN TEST COPT INTERCHANGED.	TERCHANGED.					
AUTOPILOT-ROMO-A/B STRO PACKAGE	98-04-008 6780-RATE	FAR 7-41015-888	3D \$90500	ETR	¥ 6		•
FAILURE MODE-FAILED DURIN TRO BIGNAL AMPLIFIER, THE M OUT.	FAILURE MODE-FAILED DURING OPERAYION. DURING AUTOFILOT END TO END GAIN CHECKS THERE WAS NO SIGNAL OUTPUT FROM THE 6 NO SIGNAL ANCLIFIER. THE YAW PATE 6720 MAS AUDIBLE NOISY AND BUSPECTED OF CAUSING TIDE AND TIDS TRANSFORMERS TO BUR 1 OUT.	D TO EMD GAIN CHECKS AND BUSPECTED OF CAU	THERE WAS	NO SIENA AND 1103	TANK TANK	PUT FROM THE 6	
						PACE DOGS	
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GENERAL DYMMICS CONVAIR DIVISION

18 JUN 1986

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	CITICULIES REVIEW AUTOLICO STRIEM ATRECAME	FILO: STS!EM-AIMBOR					
313TEM 3UB-373TEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	PRI VENDOR	VENDOR NAME	
	-					_	05.20
CORRECTIVE ACTION-FINAL CLEANUP INSPECTION TON FOLLOWING PRODUCTION VIBRATION TESTING.	LEANUP INSPECTION INITIANED OF ALL ELECTRONIC CANISTERS. GTRO CANISTERS OPENED FOR INSPECTIBRATION TESTING.	ELECTRONIC CANIBLE	ts. erro c	ani sters	OPENED FI	A INSPECT	
AUTOFILOT-ROUG-A/B GTRO PACKASE	FTA4700/PS-401-00-03 ROLL GYRO AMPLIFIER	1	30 590327	£1	7.63 80		99114
FAILURE MODE-FAIL TO CPER	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME, VERNIER ENGINES DID NOT RESPOND TO ROLL PROGRAM DURING LOOP TEST B ECAUSE THE ROLL GYRO ANMLIFIER OUTPUT TO THE VERNIERS MAS GROUNDED.	GINES DID NOT RESPO CUNDED.	6 TO ROLL	PROGRAM	DUATING LA	00° TEST B	
SYSTEM EFFECT-OFERATION D	SYSTEM EFFECT-OPERATION DOES NOT START. THE VERNIER EMGINES DID NOT RESPOND TO THE ROLL PROGRAM.	DID NOT RESPOND TO	THE ROLL	PROGRAH.			
VEHICLE EFFECT-NOME.							
CORRECTIVE ACTION-UNGROUNDED ANDLIFIER CUTPUT.	DED AMPLIFIER CUTPUT.						
AUTOPILOT-ROUND-A/B GTRO PACKAGE	FTA4566/P1-2BN-01-11 RATE GYRO CANISTER	CONFOSITE-B FACT	11B 590109	11 -5400	YES NO		092710
FAILURE MODE-OUT OF SPECIFICA	FAILURE MODE-OUT OF SPECIFICATION. UNINSULATED CANISTER RESULTED IN INADEQUATE HEATING AND CAUSED GYRO TORQUING RAT S TO BE OUT OF SPECIFICATION.	ULTED IN INADEQUATE	HEATING A	ND CAUSEI	EYRO TO	ROUING RAT	
SYSTEM EFFECT-INFROPER ANALOG	ALGE SIGNALS. GYRO TORQUING RATES WERE OUT OF SPECIFICATION.	MERE OUT OF SPECIFI	CATION.				
VEHICLE EFFECT-WAE.	·						
CORRECTIVE ACTION-THE CAN	CORRECTIVE ACTION-THE CANISTER WAS INSULATED PRICE TO FLIGHT.	ĵ.					
AUTOFILOT-RUND-A/8 GYRO PACKAGE	FTA4413/P1-202-00-10	2	108 581210	11/ETR	7E8 60/C NO		603608
FAILURE MODE-ERRATIC OPERATION. T P1-201-00-10. THE OBCILLATIONS ANICAL FEED BACK FROM THE VERNIES	FAILURE MODE-ERRATIC OPERATION. OBCILLATIONS OCCURRED IN THE ROLL CHANNEL DURING THE LOOP TEST OF THIS TEST AND T P1-201-60-10. THE OBCILLATIONS OCCUR DURING VERNIER OPERATION AS IN THE ROLL PROGRAM. THE APPARENT PROBLEM IS M ANICAL FEED BACK FROM THE WERNIERS TO THE ROLL RATE GYRO.	E ROLL CHANNEL DURING THE LOOP TEST OF THIS TEST AND TESTION AS IN THE ROLL PROGRAM. THE APPARENT PROBLEM IS MECH	NG THE LOC PROGRAM. T	P TEST OF HE APPAR	THIS TE	ST AND TES EN IS MECH	
SYSTEM EFFECT-ERRATIC OPER	RATION. OSCILLATIONS IN THE ROLL CHANNEL DURING THE LOOP TEST ON THIS TEST AND TEST PI-201	HANNEL DURING THE L	00P TEST 0	THIS I	EST AND T	EST P1-201	
VEHICLE EFFECT-NONE.		•					
CORRECTIVE ACTION-NOME. TI	CORRECTIVE ACTION-NOME, THESE OSCILLATIONS HAVE BEEN OBSERVED ON OTHER HISSILES.	ED ON OTHER MISSILE	i				
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						PARE DOSS	.

SEMERAL BYMANICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

ATATEN AUG-ATSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	817E 71ME 01F	VEHICLE BITE PRI VENDOR MAINE	
AUTOFILOT-ROUND-A/B GYRO PACRAUE	ZH-7-454/FC-3CO-016-05 AMPLIFIER	COMPOSITE-PACTORY 7-41015	5C 581115	FACTORY	YES NO	* 477
FAILURE HODE-OUT OF TOL	OF TOLERANCE OR SPECIFICATION, PITCH AND YAN TORBUING RATES TOO HIGH. CAUSED BY MIGH DISPLACEMENT	AN TORBUING MATER T	8 H. C.	AUSED BY	HIGH DISPLACEMENT	
SYSTEM EFFECT-IMPROPER TOLERANCE.	BYSTEN EFFECT-IMPROPER ANALOG BIGNALD. HIGH GAINS OF DISPLACEMENT GYRO AMPLIFIER CAUSED TORBUING RATES TO BE OUT OF Tolerance.	CEMENT GYRO AMPLIFI	CA CAUSED	TORBUING	RATES TO SE OUT OF	
VEHICLE EFFECT-COMPOSIT	VEHICLE EFFECT-COMPOSITE RESCHEDULED. SATISFACTORY SYSTEM AND COMPOSITE RETESTING MAS PERFORMED.	ND COMPOSITE RETERT	1 4 4 5 FE	RFORMED.		
CORRECTIVE ACTION-THE D	DISPLACEMENT GAINS WERE RESET WITHIN TOLERANCE.	TOLERANCE.				
AUTOFILOT-ROUND-A/B GTRO PACKAGE	FTA4SE3/FL-E03-00-B TAW RATE GYRO	FRF	96 3e1027	1	YES NO	£*60*
ZAILURE MODE-FAILED DUR OUNT EQUIVALENT TO 1.44 ST TEST LAB OMECHS.	FAILURE MODE-FAILED DURING OPERATION. AT BECO AND CONTINUING FOR 1; BECCADS, THE YAW HATE SYRO OUTPUT BHIFFED AN AM JUNT EQUIVALEMT TO 1.44 DEG./BEC. RATE AND REDAINED THERE INDICATING THE GYRO WAS STICKING. THIS WAS CONTINED BY PO IT TEST LAS OMECKS.	G FOR 1: SECONDS, T DICATING THE GYRO W	ME YAW HAT	E SYNO OF	HPUT BHIFTED AN AN	
SYSTEM ETFECT-INPROPER	AMALOG STGNALS					
WEMICLE EFFECT-MONE.						
CORRECTIVE ACTION-REPLACE 67RO CANISTER.	ACE GYRO CANISTER.		-			
AUTOFILOT-ROUND-A/B GTRO PACRAGE	FTA4511/P1-201-00-9	FRF	98 581014	11	YES NO	**************************************
FAILURE MODE-ERRATIC OF 8 OF THE VERNIER ENGINES T MAS DISCOVERED THAT ON	FAILURE MODE-ERRATIC OPERATION. DURING THE LOOP TEST, OSCILLATIONS APPEARED IN THE MOLL CHANNEL CAUSING OSCILLATION. I.OF THE YERHER ENGINES. TO ELIHINATE THIS, THE ROLL GYRO SIGNAL PATH WAS DISABLED. THE OSCILLATIONS RECURRED AND I UAS DISCOVERED THAT ONLY ONE OF THE TWO KOLL GYRO SIGNAL AMPLIFIER OUTPUTS HAD BEEN DISABLED.	LATIONS APPEARED IN IGHAL PATH WAS DISA MPLIFIER OUTPUTS HA	THE MOLL BLED. THE D BCEN DIS	CHANNEL (OSCILLATI	AUSTHG OSCILLATION ONS RECURRED AND 1	
BYBIEM EFFECT-ERRATIC O	RATIC OPERATION. OSCILLATIONS APPEARED IN THE ROLL CHANNEL CAUSING OSCILLATIONS OF THE VERNIER ENGI	HE ROLL CHANNEL CAU	81146 OBC11.	LATIONS (F THE VERNIER ENGI	
VEHICLE EFFECT-COUNTDO	WENICLE EFFECT-COUNTDOWN DELAYED. HOLD TIME 26 HIMUTES.					
CORRECTIVE ACTION-UNKIN	CORRECTIVE ACTION-LINKWOMM, NOT A PLIGHT PROBLEM.					
AUTOFILOT-ROUND-A/B GYRO PACKAGE	ZM-7-646/FC-3CO-03-03 FYRO-018PLACENENT	COMPOSITE-FACTORY	3c 5e101#	FACTORY	NO 7-41015	
FAILURE MODE-OUT OF TOL	OF TOLERANCE. PITCH GYRO DRIFT OUT OF TOLERANCE DUE TO PICKUP ON THE 6YRO INPUT LEADS, FROM THE TE	RANCE DUE TO PICKUP	ON THE 6:	NO IMPUT	LEADS, FROM THE TE	

GEN. DYMANICS

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3961 MAT 81	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥			
8787EH 848-8787EH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE	- E 6	VENDOR NAME	
STATEM EFFECT-OPERATION TOO	STRIEM EFFECT-OPERATION TOO HIGH. GYRO DRIFT WAS HIGHER THAN NORMAL.	NORMAL.				075760
VENICLE EFFECT-COMPOSITE DE	WENICLE EFFECT-COMPOSITE DELAYED. COMPOSITE DELAYED DUE TO INVESTIGATIVE TESTIMG.	INVESTIGATIVE TESTIF	ž			
CORRECTIVE ACTION-UNKNOWN.	INVESTIGATION REVEALED DRIFT WAS DUE TO NOISE PICKUP FROM TEST EQUIPMENT.	DUE TO NOISE PICKU	FROM TEST COULT	MENT.		
AUTOFILOT-ROUND-A/B ZH- GYRO PACKAGE HE	ZH-7-637/FC-ECM-03-10 MEATER	COMPOSITE-FACTORY 7-41015	108 561009	ž č	5/09	100000
FAILURE MODE-OUT OF TOLERAN TING SYSTEM. IT WAS DETERMIN 8 FLOWS ACROSS THE FINE HEAT TURE.	FAILURE MODE-CUT OF TOLERANCE. PITCH AND YAM GYRO TORQUING RATES WERE BELOW TOLERANCE DUE TO AN INADEQUATE GYRO HEA TING SYSTEM. IT WAS DETERMINED THAT WHEN THE CANISTER IS PLACED IN A COOLED ENVIRONMENT. HEAT FROM THE COURSE HEATERS S FLOWS ACROSS THE FINE HEATING ELEMENT, WHICH CONSEQUENTLY SENSES A TEMPERATURE MARMER THAN THE ACTUAL GYRO TEMPERATURE.	ATES WERE BELOW TOO IED IN A COCKED ENVI MENSES A TEMPERATURE	ERANCE DUE TO AN ROWENT, HEAT FR WARNER THAN THE	INADE ON THE ACTUM	AUATE GYRO HEA COURSE HEATER L GYRO TEMPERA	
SYSTEM EFFECT-IMPROPER ANAL	SYSTEM EFFECT-IMPROPER AMALOS SIGNALSCOLD ENVIRONMENT CAUSED GYRO TORQUING RATES TO BE TOO LOM.	JSED GYRO TORQUING !	ATES TO BE TOO L	į		
VEHICLE EFFECT-COMPOSITE DELATED.	LATED.					
CORRECTIVE ACTION-UNKNOWN. ER SYSTEM OR INSULATING THE MED.	NONE IN THE FACTORY-PROBLEN WAS TO BE CORRECTED IN THE FIELD BY EITHER REWIRING THE HEAT CANISTER TO ELIMINATE THE UNDESTREABLE EXTERNAL COOLING EFFECTS. COMPOSITE RETEST PERFOR	TO BE CORRECTED IN THEABLE EXTERNAL COOL	HE FIELD BY EITH ING EFFECTS. COM	CR RE- POSITE	TRING THE HEAT	
AUTOFILOT-ROUND-A/B 2N- GTRO PACKAGE HE	2H-7-638/FC-2CO-01A-13 HEATER	COMPOSITE-FACTORY 7-41015	135 FACTORY 580916	ž č	60/C 7-41015	995954
FAILURE MODE-OUT OF TOLERAN TING STSTEM. IT WAS DETERHIN ATERS FLOW ACROSS THE FINE H ERATURE.	FAILURE MODE-OUT OF TOLERANCE- PITCH AND YAW GYRO TORBUING RATES WERE BELOW TOLERANCE DUE TO AN INADEBUATE GYRO HEA TING SYSTEM. IT WAS DETERHINED THAT WHEN THE GYRO PACKAGE IS PLACED IN A COOLED ENVIRONMENT, HEAT FROM THE COURSE HE ATERS FLOW ACROSS THE FINE HEATING ELEMENT, WHICH CONSEQUENTLY SENSES A TEMPERATURE WARNER THAN THE ACTUAL GYRO TEMP ERATURE.	NATES WERE BELOW TO PLACED IN A COOLED .Y SENSES A TEMPERA.	ERANCE DUE TO AN ENVIRONMENT, HEA IURE WARNER THAM	INADE THE AC	GUATE COURSE HE THE COURSE HE	
SYSTEM EFFECT-OPERATION TOO LOW.	. LOM.					
VEHICLE EFFECT-COUNTDOAN OR INVESTIGATE PROBLEM.	R COMPOSITE DELAYED OR RESCHEDULED. COMPOSITE RETEST DELAYED DUE 10 TESTING PERFORMED TO). COMPOSITE RETEST	DELAYED DUE TO 1	£811¥	PERFORMED TO	
CORRECTIVE ACTION-UNKNOWN.	CORRECTIVE ACTION-UNKNOWN. PROBLEM WAS TO BE CORRECTED IN THE FIELD BY EITHER REWIRING THE HEATER SYSTEM OR INSULAT ING THE CANISTER TO ELIMINATE THE UNDESTREABLE EXTERNAL COOLING EFFECTS.	E FIELD BY EITHER I	EVIRING THE HEAT	E 87	NEH OR INSULAT	
AUTOFILOT-ROMO-A/B FT.	FTA4188/P1-202-00-05	FR.	58 11/ETR 580820	F G		4
FAILURE MODE-ERRATIC OPERAT	FAILURE MODE-ERRATIC OPERATION. OSCILLATIONS WERE OBSERVED IN ALL CHANNELS DURING THE LOOP TEST	IN ALL CHANNELS DUR	ING THE LOOP TEST	<u>.</u>		·····
SYSTEM EFFECT-ERRATIC OPERA	ATION,					
WENTCLE EFFECT-NONE.					•	
					PAGE DOGS	

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9961 107 61	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBORI	¥		
SYSTEM SUG-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	E PRI VENDOR NAME SIF OTH VENDOR PART NO	<u></u>
CORRECTIVE ACTION-UNKNOWN.					
ANTOFILOT-ROMB-A/B ZC-	CC-7-EEG/P1-EG8-0G-3 TAW RATE GYRO SPIN HOTOR	FLICHT	38 11 580719 1	YES NO	•
FAILURE MODE-FAIL DURING OPEI SPIN NOTOR,	OPERATION. THE YAW RATE GYRO WAS DISABLED DURING THE FLIGHT BECAUSE OF THE FAILURE OF THE	ISABLED DURING THE I	'LIGHT BECAUSE (OF THE FAILURE OF THE	
SYSTEM EFFECT-IMPROPER ANALON E LOSS OF VEHICLE STABILLITY.	ILOG BIGNALS-IMPROPER YAM CONTROL BIGNALS WERE SENT TO THE BOOSTER ENGINES RESULTING	SIGNALS WERE SENT TO	THE BOOSTER EI	-GINES RESULTING IN TH	
WENICLE EFFECT-LOSS OF WENICLE THE LOSS OF WENICLE STABILITY, I	STABILITY, BECAUSE OF AISSILE BREAKUP OCCURRE	THE EXCESSIVE LOADING CAUSED BY THE VIOLENT MANEUVERING D AT 41 SECONDS.	NED BY THE VIOLI	ENT MANEUVERING AFTER	
CORRECTIVE ACTION-SPIN HOTOR	CORRECTIVE ACTION-SPIN MOTOR ROTATION DETECTORS HAVE BEEN INCORPORATED.	NCORPORA TED.			
AUTOFILOT-ROMB-A/B FTM GYRO PACKAGE	TAE362/P4-102-00-12	социтроми	12A 14 571217 -13500	YES 3 NO	697813
FAILURE MODE-OUT OF SPECIFIC	FICATION. INDICATED GAIN PROBLEM IN ROLL GYRO.	N ROLL GYRO.			
SYSTEM EFFECT-INFROPER ANALOG SIGNALS.	A SIGNALS.				
VEHICLE EFFECT-COUNTDOWN DELL	DELAYED. 10 HIN HOLD FOR AUTOFILOT.	•			
CORRECTIVE ACTION-NOME.					
AUTOFILOT-ROMD-A/B 2C-7- GYRO PACKAGE GYRO	EC-7-093-12A/P4-102-00-12 GYRO	PLIGHT	12A 14 571217	9 9	902508
FAILURE MODE-OUT OF EXPECTED AT BECO. COMPUTATION OF AZIM MSTANT. THE ERROR IS ATTRIBUT	FAILURE MODE-OUT OF EXPECTED TEST VALUE. TRAJECTORY DATA SHOWS THAT THE MISSILE HAD A YAM DISPERSION OF 10,000 FEET AT DECO. COMPUTATION OF AZIMUTM ERROR VERSUS TIME DURING POMERED PLIGHT SHOMS THIS ERROR ANGLE TO BE ESSENTIALLY CO MSTANT. THE ERROR IS ATTRIBUTED TO AN INITIAL OFFSET ERROR FROM AN UNDETERNINED SOURCE.	OUS THAT THE MISSILL WERED FLIGHT SHOWS ROW AN UNDETERMINED	E HAD A YAW DIS THIS ERROR ANGLE SOURCE.	MISSILE HAD A YAW DISPERSION OF 10,000 FEET SHOWS THIS ERROR ANGLE TO BE ESSENTIALLY CO RMINED BOURCE.	
SYSTEM EFFECT-NONE.					·
VEHICLE EFFECT-IMPROPER TRAJ	TAJECTORY. TRAJECTORY DATA SHOUS A	A YAW DISPERSION OF	APPROXIMATELY 1	APPROXIMATELY 10,000 FEET AT BECO.	
CORRECTIVE ACTION-NOME.					
AUTOPILOT-ROUND-A/B FTAI	TA2427/P2-104-00-10	COUNTDOAM	10A 12 571216 -17020	YES 0 %0	-
FAILURE MODE-OUT OF EXPECTED MAKEL C.	TED TEST VALUE, AUTO PILOT GYRO CANISTER WAS CAUSING EXCESSIVE MOISE ON TELEMETRY RF	NISTER WAS CAUSING	EXCESSIVE HOISE	ON TELEMETRY RF 3 CHA	<u> </u>
				PAGE GOSS	

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

STSTEN SIE STSTEN	TEST/REPORT NUMBER	DIF DATA SOURCE	VEHICLE DATE DIF	817E	PRI	VENDOR NAME	
SYSTEM EFFECT-NOME.							88740C
VEHICLE EFFECT-COUNTDOMN DI UP MITH COUNT.	DELAYED. APPROXIMATELY 202 MINUTES OF HOLD TIME TO INVESTIGATE PROBLEM, CORRECT, AND CATCH	OF HOLD TIME TO IN	VESTI CATE	PROBLEM,	CORRE	CT, AND CATCH	
CORRECTI VE ACTION-REPLACE	GYRO CANISTER.						
AUTOFILOT-ROUND-A/B ETRO PACKAGE	FTAE4EE7/PE-104-00-10 GTRO-DIBPLACEMENT, PITCH	COUNTDOAN	10A 571216	12 -12000	7E8 NO		897401
FAILURE MODE-FAIL DURING	FAILURE MODE-FAIL DURING OPERATION. PITCH GYRO APPEARED TO STICK DURING GYRO STICTION	STICK DURING GYRO S	TICTION TE	TEST.			**************************************
SYSTEM EFFECT-ERRATIC OFFRATION.	RATION.					٠	
WENTELE EFFECT-COUNTDOMN ABORTE EN ABORTED DUE TO BOTH PROBLEMS.	WENTCLE EFFECT-COUNTDOWN ABORTED AND RESCHEDULED. 1E NINUTES OF HOLD SHARED WITH FUEL LEAKAGE PROBLEM. COUNTDOWN TH H ABORTED DUE TO BOTH PROBLEMS.	S OF HOLD SHARED WI	TH FUEL LE	AKAGE PR	JOLEM.	COUNTDOMN TH	
CORRECTIVE ACTION-UNKNOWN.							
AUTOFILOT-ROUND-A/B , GTRO FACKAGE	ZN-7-493/FC-1CO-03-14	COMPOST TE-PACTORY	14A 571014	FACTORY	22		696379
FAILURE MODE-ERRATIC OPER.	FAILURE MODE-ERRATIC OPERATION-AT 71 SECONDS ERRATIC OPERATION OF ALL A/P OPERATOR PLACED THE ROLL BIAS SAITCH TO THE CCM POSITION INSTEAD OF OFF.	TON OF ALL A/P SAND HSTEAD OF OFF.	ORN CHANNE	LS 1448 II	T T T T T	SANDORN CHAMPELS WAS INDICATED BECAUSE TH	
SYSTEM EFFECT-ERRATIC OPERATION	RATION						
WEHICLE EFFECT-COMPOSITE	WEMICLE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE RETEST (FARTIAL) WAS REQUIRED.	ITIAL) WAS REQUIRED.					
CORRECTIVE ACTION-OPERATOR	R CAUTIONED TO EXERCIZE GREATER CARE WHEN OPERATING SWITCH.	IRE WHEN OPERATING S	WITCH.				
AUTOPILOT-ROUND-A/B	ZN-7-473/FC-1CO-03-09	COMPOSTITE-FACTORY	9A 570823	FACTORY	22		896153
FAILURE MODE-FAIL DURING BEGINNING AND END OF ROLL	FAILURE MODE-FAIL DURING OPERATION-CROSS-COUPLING OF D.2 VOLTS WAS EVIDENT ON THE PITCH AND YAM GYRO OUTPUTS AT THE BEGINNING AND END OF ROLL GYRO TORGUING.	X.TS WAS EVIDENT ON	THE PITCH	AND YAW	CYRO C	WIPUTS AT THE	
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS.	MLOG BIGNAL3.						
VEHICLE EFFECT-COUNTDOWN IN THE CAUSE.	VEHICLE EFFECT-COUNTDOWN OR COMPOSITE DELAYED OR RESCHEDULED-NUMEROUS RETESTS WERE PERFORMED IN AN ATTEMPT TO DETER INE THE CAUSE.	ID-NUMEROUS RETESTS	VERE PERF	WHED IN	AN AT	EMPT TO DETER	
CORRECTIVE ACTION-OUTPUTS	OF THE TORQUER TE IN THE AGE.	AMPS AND CATHODE FOLLOWERS WERE FREE OF CROSS COUPLING. THEREFORE THE MISSILE WAS ACCEPTED WITH THE PROBLEM WARESOLVED.	OF CROSS (COUPLING.	THERI	FORE THE PROB	
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						PAGE 0070	-, ,

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18 104 1986	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	FILOT SYSTEM-AIRBON	¥		
SYSTEM BUE-BYSTEM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DATE DIF	PRI VENDCA NAME OTH VENDOR PART HO	
AUTOFILOT-ROMG-A/E GYRO PACKAGE	KH-433/106,D-4	CAPTIVE	3A \$YC 570527	YES NO	0.658.0
FAILURE MODE-OUT OF SPECI	PECIFICATION. THE GAINS WERE 0.833 VOLTS/SEC FOR PITCH AND 0.87 VOLTS/SEC FOR TAM, MOMENAL DES AND 0.89 FOR TAM.	18/SEC FOR PITCH AN	D 0.87 WOLTS/SEC	FOR YAM, MOMENAL DEE	
SYSTEM EFFECT-OPERATION	ON TOO LOW, THE END TO END GAINS OF THE FLIGHT CONTROL SYSTEM WERE TOO LOW.	E FLIGHT CONTROL SY	STEN WERE TOO LOW		
VEHICLE EFFECT-NOME.					
CORRECTIVE ACTION-UNKNOWN	MONN.				
AUTOFILOT-ROMD-A/B	SP-9D-04-3347F DISPLACENENT GYRO	FAR 27-41002-909	128D WIR	9 .0	694733
FAILURE MOSE-OUT OF TO MOT CONFIRMED. THE FAUN	FAILURE MODE-OUT OF TOLERANCE-GYRO PACKAGE 1870 FOR EXCESSIVE YAM MULL WOLTAGE. THE DISH NOT CONFIRMED. THE FAULT WAS TRACED TO THE RENOTE THREE-RATE GROUP. (REF.SP-90-04-3350).	VE YAW MULL VOLTAGE GROUP. (REF.8P-90-	. THE DISP. 67RO 04-3350).	VOLTAGE. THE DISP. GYRO PACKAGE FAILURE MAS '.8P-90-04-3350).	
CORRECTIVE ACTION-NO CORR	CORRECTIVE ACTION WITH RESPECT TO GYROSCOPE CANISTER BECAUSE THERE WAS NO FAILURE OF	SCOPE CANISTER BECA	USE THERE WAS NO	FAILURE OF PART.	
AUTOPILOT-ROUND-A/B FILTER AND SERVOAMP	B2-4MO-02-41 COAK-COMECTOR	COMPOST TE-FRD/DFL	41D B-E 650323	22	096440
FAILURE MODE-FAIL TO OPERATE COAX CONNECTOR 30419.	OPERATE AT PRESCRIBED TIME, BOOGTER ENGINES NOT MALLED IN PITCH DUE TO A FAULTY CONNECTION IN	GINES NOT MULLED IN	PITCH DUE TO A F.	AULTY COMMECTION IN	
SYSTEM EFFECT-OPERATION	SYSTEM EFFECT-OPERATION DOES NOT START. PLIGHT CONTROL FAULT ON LAP.	T ON LAP.			·
VEHICLE EFFECT-COMPOSITE	ITE DELATED.				
CORRECTIVE ACTION-RESK	CORRECTIVE ACTION-RESOLDERED CONNECTION AT COAX CONNECTOR 30419 AT LAUNCHER.	DAJS AT LAUNCHER.			
AUTOPILOT-ROUND-A/B FILTER AND SERVOAMP	D1-402-00-166 CCHPARATOR	COMPOST TE-FRD/DPL	166D B-1 650112	22	696306
FAILURE MODE-FAIL DURING	ING OPERATION. VE YAM BIAS FAULT LIGHT ON THE LAP DURING LOOP TEST WAS RECEIVED.	ON THE LAP DURING	LOOP TEST WAS REC	EI VED.	
SYSTEM EFFECT-IMPROPER AN	SYSTEM EFFECT-IMPROPER ANALOG SIGNALS. NORMALLY OPEN CONTACTS WOULD NOT CLOSE PROPERLY. THE GIMBAL COMPARATOR WAS N IT SUPPLIED WITH THE PROPER REPERENCE VOLTAGE FOR THE BIAS PROGRAM.	TS WOULD NOT CLOSE ROGRAM.	PROPERLY. THE GIM	BAL CCMPARATOR WAS N	
VEHICLE EFFECT-LAUNCH COMPOSITE DELAYED.	COMPOSITE DELATED.				
CORRECTIVE ACTION-CONTACT	TACTO BURNIOHED.				
				PAGE 0071	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

AVSTEN BUG-BYSTEN	TEST/REPORT NUMBER DIF DATA SOURCE VI	DIF DATA SOURCE PART NUMBER	EHICLE ATE DIF	817E	PRI VENDOR NAME OTH VENDOR PART NO	<u>\$</u>
AUTOFILOT-ROUND-A/B FILTER AND SERVOAMF	A-99-04-4405-F SERVOAMPLIFIER-CALISRATION RESISTO 27-41301-1 R	FAR 0 27-41301-1	630919	FACTORY	7E8	17160
FAILURE MODE-OUT OF TOLERANCE. AT CALIBRATION RESISTOR R-224 M	FAILURE MODE-OUT OF TOLERANCE. SERVOAMPLIFIER WAS IR/D FOR LOM GAIN. THE AMPLIFIER WAS DEPOTTED AND IT WAS FOUND TH AT CALIBRATION RESISTOR R-RE4 HAD NEVER BEEN INSTALLED.	LON GAIN. THE AMPLI	FIER WAS DI	EPOTTED A	O IT MAB FOUND	F
CORRECTIVE ACTION-RAR A-SI TIONS AND TO INFROVE THEIR	8-04-3768 WITTEN TO INSTRUCT INSPECTION OF THIS UNIT. REF	MANUFACTURING PERSONEI HIL-1-FBP.	. TO ADHERE	TO HANUE	ACTURING SPECIF	ICA
AUTOPILOT-ROUND-A/B FILTER AND SERVOAMP	A-99-04-4450-F AMPLIFIER-MODEMOD.	FAR 7-41895-3	630612	FACTORY	YES	993451
FAILURE MODE- OUT OF EBISTOR R-1101 HAD AN	FAILURE MODE- OUT OF TOLERANCE. THE MODULATOR-DEMODULATOR AMPLIFIER ASS. ESISTOR R-1101 MAD AM INCORRECT VALUE OF 10 K OHMS INSTEAD OF 40 K OHMS.	AMPLIFIER ASSEMBLY COULD NOT BE MULED. IN UNIT S/N 646 OF 45 K CHES.	COULD NOT BE	E HULED.	IN UNIT 8/H 64	# •
CORRECTIVE ACTION-NOME.	E. THESE UNITS NO LONGER MADE.					
AUTOFILOT-ROUND-A/B FILTER AND SERVOAMP	A-99-04-4450-F AMPLIFIER	FAR 7-41695-3	630806	FACTORY	YES	993452
FAILURE MODE-OUT OF TOLERANCE. MISMIRING MAS FOUND, MIRE FROM	OLERANCE. THE MODULATOR- DEMODULATOR AMPLIFIER ASSEMBLY COULD NOT BE MULED. IN UNIT S/N 851 WIRE FROM PIN E WAS INCORRECTLY CONNECTED TO POINT 11 (DWG 7-41165 AND 7-41895).	AMPLIFIER ABSEMBLY (COULD NOT BI	E WULLED. AND 7-418	IN UNIT S/N 8: 95).	< ₽
CORRECTIVE ACTION-NOME.	E. THESE UNITS NO LONGER MADE.					· · · · · · · · · · · · · · · · · · ·
AUTOPILOT-ROUND-A/B FILTER AND SERVOANP	A-99-04-4321-F TACHOMETER	FAR 7-41660-1	630307	FACTORY	YES KEARFOTT NO REDG-1A	891342
FAILURE MODE-ERRATIC (AUSE OF FAILURE MOT DE BREJELY.	FAILURE MODE-ERRATIC OPERATION. MOTOR- GENERATOR FAILED WHEN TACHOMETER OUTPUT WAS ERRATIC. FAILURE COMFIRMED BUT C AUSE OF FAILURE WOT DETERHINED BY FAILURE ANALYRIS. MOST PROBABLE CAUSE OF FAILURE IS CONTAMINATION LOST DURING DISA SAEMBLY.	WHEN TACHOMETER OUTPUT WAS ERRATIC. FAILURE COMFIRMED BUT C PROBABLE CAUSE OF FAILURE IS CONTAMINATION LOST DURING DISA	T WAS ERRAT LURE 18 CON	IC. FAILU TAHINATIO	RE CONFIRMED BY N LOST DURING	JT C
CCRRECTIVE ACTION-VENDOR CONTACTED.	DOR CONTACTED. NO POSITIVE CORRECTIVE ACTION SINCE CAUSE OF	ACTION SINCE CAUSE		TACHONE	ERRATIC TACHONETER WAS NOT DETERMI	I E
					PAGE 0073	

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

97.5TER	TEST/REPORT NUMBER	DIF DATA SOURCE	VEHICLE	817E	PRI VENDOR NAME	سنست
AUTOPILOT-ROMD-A/B	A-66-04-488F AMPLIFIER/0100E	FAR 27-41801-1	630304	FACTORY		91304E
FAILURE MODE-OUT OF TOLERANCE. MERE DUE TO DEFECTIVE DIODES II BEEN DAMAKED BY EXCESS VOLTAGE	. THO BERVO AMPLIFIERS IN THE CRZOS POSITION. OR CURRENT. THE CAUSE	WERE REJECTED FOR OUT-OF-TOLERANCE OUTPUT CURRENT. THE ONE WAS OPEN AND ONE WAS SHORTED. BOTH DIGDES APPEARED OF THE DAMAGE WAS NOT LEARNED.	OLERANCE (HORTED & NED.	MTPUT CU	APPEARED TO HAVE	
AUTOFICOT-ROMO-A/B	A-99-04-4162-F HOTOR GENERATOR-TRANSFORMER	FAR 7-41661-3	630122		YES KEARFOTT NO	129744
FAILURE MODE-OUT OF TOL PRANSFORMER. AMALYSIS CO CORRECTIVE ACTION-NOME.	ERANCE. THO INTEGRATOR HOTOR METRIED THE FAILURES BUT THE	GENERATORS HAD HIGH MULL READINGS FROM THE ROTARY DIFFERENTIAL CAUSE COULD NOT BE DETERMINED.	EADINGS 17	96 96 98	STARY DIFFERENTIAL	
AVTOFILOT-ROIND- A/B FILTER AND SERVOANP	AX62-0070/FC-4CO-03-0502-002 AMPLIFIER	COMPOSITE-FACTORY	1160	FACTORY	7/05 CM	19899
FAILURE MODE-ERRATIC OPERATION. MUMEROUS GLI YAM ISOLATION AMPLIFIER WAS REPLACED IN 65E.	FAILURE MODE-ERRATIC OPERATION. MUMEROUS CLITCHES WERE INDICATED ON CHAMMEL 1, (VERHIER NO.1 YAN), THE VERNIER NO.1 YAM ISOLATION AMPLIFIER WAS REPLACED IN 69E.	CATED ON CHANNEL 1,	(VERNIER	HO.1 YAW	. THE VERNIER HO.S	
SYSTEN EFFECT-NOME, VEHICLE EFFECT-COUNTDOWN RESC	M RESCHEDUED. RE-RUN OF COMPOSITE NEGUIRED.	EeulaeD.				
CORRECTIVE ACTION-19QLA	CCRECCTIVE ACTION-180LATION ANDLIFIER WAS REPLACED IN 68E.					
AUTOPILOT-ROUND-A/B FILTER AND SERVOANP	8F-96-04-3335F AMPLIFIER	FAR 27-41000-851	1790	ETR	NO 60/C	094547
FAILURE MODE-FAIL DURING OPER TER. THE FAILURE MAS NOT CONFI IRING IN THE GAE.	FAILURE MODE-FAIL DURING OPERATION. THE BERVO AMPLIFIER WAB IR/D FOR A REPORTED NO OUTPUT FROM THE BOOSTER FOLL FIL TER. THE FAILURE MAS NOT COMFIRMED. HOMEYER THE IRREGULARITY WAB TRACED TO AN ERROR IN THE SPECIAL INSTRUMENTATION W IRING IN THE GRE.	IR/D FOR A REPORTE	TREASE IN T	JT FROM TI	HE BOOSTER ROLL FILL INSTRUMENTATION M	
CORRECTIVE ACTION-NOME,	CORRECTIVE ACTION-WOME, AS THE SPECIAL INSTRUMENTATION WAS REMOVED PRON THE HISSILE.	REMOVED FROM THE HI	881LE.			
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	Directing Arthmatolical of all and an and an arthmator are	OFILO: STRIKE ALABO	-				_
BYSTEN BUB-BIBTEN	TEST/REPCAT HUNBER FAILED COMPONENT HAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	# 0 # 1	VENDOR NAME VENDOR PART NO	
AUTOFILOT-ROUND-A/B	TA-BB-CA-BUSTY TAANSI STOR-AMPLIFIES	FAR E7-41000-843	1130	ETR	¥ 8		094723
FAILURE MODE-ERRATIC ES OSCILLATION MAS MEA 350-605 ELIMINATED THI	FAILURE MODE-ERRATIC OPERATION, THE PITCH D-C AMPLIFIER OUTPUT WAS FOUND MOISY. OME-HUMDRED MILLIVOLTS 150 RILOCYCL. ES OSCILLATION WAS MEASURED AT AMPLIFIER OUTPUT, REPLACEMENT OF TRANSISTOR 65 (END43) IN THE D-C AMPLIFIER P/N E7-45 556-605 ELIMINATED THIS MIGH FREGUESCY OBCILLATION.	UTPUT MAS FOUND NOIS' NI OF TRANSISTOR 85	r. OME-HUM	THE D-C	ANPLI	S 150 AILOCYCL FIER P/N 27-41	
CORRECTIVE ACTION-FLI	CORRECTIVE ACTION-FLIGHT CONTROLS GROUP STUDYING SOURCE OF HIGH FREQUENCY OBCILLATIONS. THE EOP WAS MODIFIED TO LIM T TOTAL AMPLITUDE OF MOISE BETWEEN THE FREQUENCY RANGE OF 10 KILOCYCLES TO 1 MEGACYCLE TO 25 MILLIVOLTS.	F HIGH FREQUENCY OSC.	HLATIONS.	THE EOF	1 8 8 H	ФІРІЕВ ТО LIM 18.	
AUTOPILOT-ROUND-A/B FILTER ANG SERVOANP	45-64-53-64-F	FAR 27-41000-831	1790 62081\$	ETR .	¥6.	YES 60/C NO	•
FAILURE MODE-ERRATIC AND DESTRUCTIVE TESTS	ic opcration-the servo-and, -filter package has ir/d for ed its on this unit failed to confirm this reported failure.	PACKACE WAS IR/D FOR ERRATIC SUSTAINER PITCH OUTPUT. EXTENSIVE THIS REPORTED FAILURE.	ATIC \$U\$TA	INCR PIT	5 *	PUT. EXTENSIVE	
CORRECTIVE ACTION-NOME.	ڼ						
AUTOFILOT-ROUND-A/B FILTER AND DERVOAN	37-98-04-3364F AMPLIFIER-TRANSFORMER	FAR 27-41000-851	1790 620803	CTR	YES ON	5/O5	149760
FAILINE MODE: ERRATIC OPERATION, TO TOTAL LOSS OF CONTROL MAS OBSERVED.	E SERVOAMPLIP FAILURE WAS TE, CAUSE OF	TER WAS REJECTED WIEN ERRATIC MOTION IN TH TRACED TO SHORT-CIRCUIT IN TRANSFORMER TE. FAILURE WAS POOR IMPREGNATION OF WINDINGS.	MOTION IN ANSFORMER OF WINDIN	THE YAW TE. NUMES	CHANG COUS O	EL FOLLOIED BY THER CONFORENT	
CORRECTIVE ACTION-THE	THIS IS A RECURRING PROBLEM, S.I. 116-62 AND IRI-62 ISSUED TO FIND FAULTY TRANSFORMERS.	E AND IRI-62 ISSUED	TO FIND FA	ULTY TRAI	SFORM	ER3.	
AUTOFILOT-ROUND-A/B FILTER AND BERYOAMP	8F -66 - 64 - 3321F AMPLIFIER - 01 00E	FAR E7-41000-851	1790	#	ž g		11000
PAILURE MODE-ERRATIC DEFECTIVE DIODES IN TH	C OPERATION. BERYCAMPLIFIER PACKAGE IR/D FOR ERRATIC OPERATION. ELECTRICAL TESTS REVEALED THREE THE OUTPUT OF THE VERNIER ROLL D-C AMPLIFIER.	IND FOR ENRATIC OPERA	710M. ELEC	TRICAL TI	£ 878.	EVEALED THREE	,
CORRECTIVE ACTION-1907 RNOMA.	T RWOMM.	AARIN AAARINA PERINANJARAN PARINANJARAN PERINANJARAN PERI					

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	# 11 5 V 8	STORY TOCATOLINA	NATABEROST NUMBER	VEHICLE	3116		VENDOR MANE	
	2019-8-1818 2019-8-1818	FAILED COMPONENT NAME	PART NUMBER	DATE DIF	DATE DIF TIME DIF		OTH VENDOR PART NO	
	AUTOFILOT-ROUND-A/B FILTER AND SERVOAMP	\$P-\$2-04-1358F \$ERVOAMPLIFIER-DIODE	FAR 27-41000-831	1790	71 41	¥ Q		***************************************
	FAILURE MODE-OUT OF TOLE LL FROM 33 TO 42.7 DEGREE E REVERSE CHARACTERISTICS	OF TOLERANCE. THE SERVOAMPLIFIER WAS REJECTED AFTER THE VERHIER ENGINES INDICATED AN UNEXPECTED RO. • DEGREES, TESTS REVEALED 3 OUT OF 4 ZENER DIODES IN VERHIER ROLL D-C AMPLIFIER HAD GUT-OF-TOLERANC RISTICS, PROBABLY CAUSED BY EXCESSIVE VOLTAGE BEING APPLIED.	WELFTER WAS REJECTED AFTER THE VERH S OUT OF 4 ZENER DIODES IN VERHIER SAY EXCESSING APPLIED.	IER ENGINE ROLL D-C A	B INDICATION	TEG AN	THE VERHIER ENGINES INDICATED AN UNEXPECTED RO VERNIER ROLL D-C AMPLIFIER HAD GUT-OF-TOLERANG APPLIED.	
	CORRECTIVE ACTION-BASE I	CORRECTIVE ACTION-BASE PERSCHEEL ARE TAKING STEPS TO ELIMINATE THE POSSIBILITY OF INJECTING SPURIOUS VOLTAGES TO SY TEN.	ININATE THE POSSIBILIT	Y OF INJEC	71146 SPU	\$701	VOLTAGES TO SY	
	AUTOFILGT-ROAND-A/B FILTER AND SERVOAMP	AEGE-D691 RE40200-141	7181	1410	# · · ·	YES 60/0	3/09	1100
	FAILURE HONE-FAIL TO OFF REALLY ATTENUATED APPARE,	. TO OPERATE AT PRESCRIBED TIME, DURING THE FIRST SO SECONDS OF FLIGHT EMGINE RESPONSE IN YAW WAS G APPARENTLY DUE TO THE LOSS OF THE STABILIZATION FILTER OUTPUT. BESIDE FAILURE OF THE FILTER ITSELF HAVE BEEN IN A CONNECTOR OR MARNESS OR FAILURE OF PROGRAMMER SMITCH AS.	THE FIRST SO SECONDS ILIZATION FILTER OUTPU R FAILURE OF PROGRAMME	OF FLIGHT T. BESIDE P. SMITCH A	CHGINE R	ESPONS OF THE	E IN YAW WAS G FILTER ITSELF	
	SYSTEM EFFECT-INPROPER A	SYSTEM EFFECT-INPROMER AMALOS SIGNALS. YAW CONTROL WAS MARGINAL DURING THE FIRST SO SECONDS OF PLIGHT. AFTER SO SEC NOS WHEN THE FILTER OUTPUT SIGNAL WAS AGGUIRED, SYSTEM PERFORMANCE WAS SATISFACTORY.	MARGINAL BURING THE FI PERFORMANCE WAS BATISF	RST SO SEC ACTORY.	- 50 eges	7	. AFTER SO BEC	
	VEHICLE LEFECT-MOME, SIN	VEHICLE EFFECT-HOME, SINCE THERE WERE NO BIGNIFICANT DISTURBANCES TO THE MIBSILE EARLY IN THE FLIGHT, ACQUISITION O CONTROL IN THE YAM CHAMPEL AT SO SECONDS WAS SATISFACTORY FOR OVER-ALL MIBSION ACCOMPLISHMENT.	STURBANCES TO THE MISSING FOR OVER-ALL MISSI	THE EARLY	IN THE PL	.19.1	ACQUISITION O	
	CORRECTIVE ACTION-UNKNOWN.	ź						
	AUTOFILOT-ROUND-A/B FILTER AND SERVOAMP	SP-90-04-3320F CIRCUIT BOARD-TRANSISTOR	5AR 27-45 JOD-849	1190	Š	9.8	5/0 5	456074
	FAILURE HODE-FAIL DURING ISTOR AS LAS FOUND TO HAN	DURING OPERATION. IN BOOSTER NO. 2 YAW SERVO NP., AGAR CIRCUIT BOARD (P/H 27-41361-903) THE TRANS To have an open emitter, caused by short external to the camister.	w bervo mp., abar circ ort external to the ca	ULT BOARD HISTER.	- La (2/4)	41361-	903) THE TRANS	·
	CORRECTIVE ACTION-THE BI	CORRECTIVE ACTION-THE BENT TO SITE PERSONNEL TO USE EXTREME CARE WHEN CHECKING OUT COMPLEY CIRCUITS OR TROUBLE ING.	REME CARE WHEN CHECKIN	6 out cow	LEX CIRC	0 1 t 0	A TROUBLE SHOO	
	AUTOPILOT-ROUND-A/B PILTER AND SERVOAN	#P-BD-G4-33EOF CIRCUIT BOARD-DICOE	FAR E7-41000-848	11.00 dg070\$	Œ	8 8	9/Q	
	FAILUME MODE-SHORT (ELEC.	FAILURE MODE-SHORT(ELEC)IN BOOSTER HO Z. YAM SERYO- AMPLIFIER ASAR CIRCUIT BOARD (P.24 E7-41361-803) THE DICOT CR-5 Mas shorted and burned, caused by short circuit external to 6yro Packabe.	LIFIER AGAE CINCUIT BC TO GYRO PACKABE.	AND CRUZE	- 100 17-6	1800	8-80 I CB-8	
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		ting distribution of the different time of the control of the first of the control of the contro					PAGE 0076	Partii

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			6 4 60 7 3				*****			101374
	VEHICLE BITE PRI VENDOR HAME DATE DIF TIME DIF OTH VENDOR PART NO		2/09	-603) DICOL CA		03) THE TRANSI		MULL BIGNAL FROM GYRO, POMER 3U THREE PHASES. CAUSED BY SHORT-C	SYSTEM CHECKS	
	# 0 # 7	TROUG B	3 	1361. 10E.	है ई	5	99	CAU.	ğ	ž 2
	417E 11AE DIF	STEHS OR	5	(P/N 87-	5	F/N E7-41	5	L BIGHAL EE PHASES	כב כב כס	FACTORY
Ä	VEHICLE DATE DIF	COMPLEX BY	1190 620705	CUIT BOARD	1190	IT BOARD O	1190 620705	IPT OF ME.	PERFORMAN	*100Z9
PILOT SYSTEM-AIRBO	DIF DATA BOUNCE PART NUNDER	CARE IN CHECKING	FAR E7-41000-848	MPLIFIER, ABAR CIRC IBTER, CARE WHEN C/O OF CO	FAR E7-41000-640	VOAMPLIFIER, CIRCU) TO CANISTER. TREME, CASE, IN C/O (PAR	ENGINES UPON RECE.	XTREME CARE DURING	第一日香油 11中二人
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	TEST/REPORT NUMBER FAILED COMPONENT NAME	M-TMM SENT TO SITE PERSONNEL TO USE EXTREME CARE IN CHECKING COMPLEX SYSTEMS OR TROUBLE SHOOTING.	SF-80-04-33EGF CIRCUIT BOARD-DIOM	PAILUNG MODE-FAIL DURING OPERATION. BOOSTER 1 PITCH BERVO-AMPLIFIER, ABAR CIRCUIT BOARD (7/M 27-41381-603) DIOOE CR 8 WAS OPEN-CIRCUITED CAUSED BY SHORT CIRCUIT EXTERNAL TO CANISTER. CORRECTIVE ACTION-THR SENT REMINDING SITE PERSONNEL TO USE CARE WHEN C/O OF COMPLEX SYSTEMS IS MADE.	8P-90-04-3320F A-E CIRCUIT BOARD-TRANSIBTON	FAILURE HODE-FAIL DURING OPERATION. IN BOOSTER NO.R TAN BERVOAMPLIFIER, CIRCUIT BOARD (P/N 27-41361-403) THE TRANSI TOR 43 MAS FOUND SHORTED. CAUSED BY SHORT CIRCUIT EXTERNAL TO CANISTER. CORRECTIVE ACTION-TAX SENT TO SITE REHINDING THEN TO USE EXTREME CARE IN C/O OF COMPLEX CIRCUITS OR DURING TROUBLE	SP-9D-04-332DF POMER SUPPLY TRANSFORMER	FAILURE MOE-FAIL TO GPERATE. SERVOAMPLIFIER FAILED TO MULL ENGINES UPON RECLIPT OF MULL SIGNAL FROM GYRO, POMER SU PPLY BOACD (27-41783-1) MAD TRANSFORMER TI WITH GPEN-CIRCUIT PRIMARY MINDINGS IN ALL THREE PHASES. CAUSED BY UMORT-C IRCUITIMG SERVO OUTPUTS EXTERNAL TOCANISTER.	WHEL AT TEST SITE CAUTIONED TO UNE EXTREME CARE DURING PERFORMANCE OF COMPLEX SYSTEM CHECKS. Ref. (TWX 578-588 SOF E MARCH 42).	A-99-04-3251-F INTEGRATOR TRANSFORMER
11 104 1986	BTBTEN 2.53-BYBTEN	CORRECTIVE ACTION-TWK ME	AUTOFILOT-ROUND-A/B	FAILURE MODE-FAIL, DURING 8 MAS OPEN-CIRCUTTED CAUS CORRECTIVE ACTION-THM SE	AUTOFILOT-ROUND-A/B FILTER AND SERVOANF	FAILURE MODE-FAIL DURING BYOR 4S MAS FOUND SHORTED CORRECTIVE ACTION-TAX BE	AUTOPILOT-ROAND-A/B	FAILURE MOE-FAIL TO OPERATE, SERWAMPLIFIE PPLY BOARD (27-41783-1) HAD TRANSFORMER TI W IRCUITIMG SERVO OUTPUTS EXTERNAL TOCANISTER.	CORRECTIVE ACTION-PERSONNEL AT TEST SITE CAUTION TROUBLESHOOTING. ALSO REF. (TWX 578-588 SOF	AUTOFILOT-ROUND-A/B FILTER AND BERVOAMP

FAILURE MODE-FAIL TO OPERATE. NO YAW OUTPUT. DANAGE TO SCREWS AND POOR SOLDERING INTERNALLY INDICATED UNIT HAD BLEN OPENED PREVIOUSLY. A BROKEN WIRE IN A TRANSPORMER CIRCUIT ACCOUNTED FOR THE FAILURE. THIS COMPONENT WAS APPARENTLY RETURNED FROM THE PIELD.

CORRECTIVE ACTION-NONE BECAUSE EXACT REASON FOR BROKEN WIRE NOT DETERMINED.

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE FART NUMBER	VEHICLE BE	SITE PRI VEND	PRI VENDOR MANE OTH VENDOR PART HO	
AUTOPILOT-ROLID-A/B FILTER AND BERYOAMP	A-94-04-3229F Bervoamelifier	FAR 27-41000-631	54F ALTUS 620502	7 7E8 60/C		494595
FAILURE MODE-OUT OF TOLET	FAILURE MODE-OUT OF TOLERANCE-THE BERVO AMPLIFIER MAD LOM NO-608 ON MAPCHE CHECK OUT OF BUSTAINER YAW-FREQUENCY RES OMSE.	D-GOS ON MAPCHE CHE	ix out of sust	LINER TAW-F920	DUENCY RES	
CORRECTIVE ACTION-UNKNOWN, FAILURE UNCONFIRMED.	M. FAILURE UNCONFIRMED.					
AUTOPILOT-ROUND-A/B	AE61-0964/FCA-4CO-03-140	COMPOSITE-FACTORY	1400	7E\$		699455
FAILURE MODE-FAIL DURING OPER INATELY 4.6 VOLTS MICH IS NOT	FAILURE MODE-FAIL DURING OPERATION- YAW INTEGRATOR IN PROGRAMMER- INTEGRATOR- SEAVO CANISTER WAS LIMITING AT APPROX MATELY 4.6 VOLTS WHICH IS NOT ENOUGH TO GIVE A HIGH SIGNAL.	AMER- INTEGRATOR-	JERVO CANISTER	WAS LIMITING	AT APPROX	
SYSTEM EFFECT-OPERATION	SYSTEM EFFECT-OPERATION TOO LOW- INTEGRATOR CUTPUT TOO LOW.		٠			,
VEHICLE EFFECT-COMPOSITE RESCHEDULED.	E RESCHEDULED.					
CORRECTIVE ACTION-PROGRAI	CORRECTIVE ACTION-PROGRAMMER-SERVO- CANISTER REPLACED.					
AUTOPILOT-ROUND-A/B FILTER AND SERVOAMP	AE61-090%1/FCA-4CO-02-140	COMPOSITE-FACTORY	140D FACTORY 610929	ORY YES GD/C NO		618458
FAILURE MODE-FAILED TO OPERATE AT PRESCRI DID NOT HOVE THE ENGINES IN THE YAW PLANE.	FAILURE MODE-FAILED TO OPERATE AT PRESCRIBED TIME. DECK 15-714, CARDS 406, 406, AND 422 (ENGINE POSITION POLARITY) ID NOT NOVE THE ENGINES IN THE YAW PLANE.	714, CARDS 406, 408	, AND 422 (ENG	INE POSITION	POLARITY)	
SYSTEM EFFECT-OPERATION DOES	DOES NOT START AUTOPILOT FAILED TO HOVE ENGINES IN YAM PLANE.	O HOVE ENGINES IN Y	NU PLANE.			
VEHICLE EFFECT-COMOBITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED- COMPOSITE RESCHEDULED					
CORRECTIVE ACTION-SERVO CANISTER REPLACED.	CANISTER REPLACED.					
AUTOPILOT-ROUND-A/B FILTER AND BERVOAMP	AE81-0984/FCA-4CO-01-140	COMPOST TE-FACTORY	140D FACTORY 610921	98Y 150 65/C		399460
FAILURE MODE-OUT OF TOLES	FAILURE MODE-OUT OF TOLERANCE, THE FREQUENCY RESPONSE MAS LOW. THE TRANSFER FUNCTION ANALYZER HAD FAILED TO RESET.	OM. THE TRANSFER FU	HCTION ANALYZE	R MAD FAILED	TO RESET.	
STRIEM EFFECT-PREQUENCY	SYRYEN EFFECT-FREQUENCY RESPONSE INDICATED TOO LOW CAUSED BY FAILURE OF TEST EQUIPMENT TO RESET.	IY FAILURE OF TEST E	BUIPHENT TO RE	SET.	,	
VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED- COMPOSITE RE-RAM AT REQUEST OF AIR FORCE AC.	EQUEST OF AIR FORCE	<u>.</u>			
CORRECTIVE ACTION-NOT KNOWN.	CuM.					
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224	DIFFICULTIES REVIEW-AUTOPILOT STATEM-AIRSORME	TOPILOT BYSTEN-AIRSO	Ä				r
X 3 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1	TEATHEFORT MUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VENICLE DATE DIF	VENICLE BITE PRI	9 0 1 2 2	VENDOR NAME	
AUTOFILOT-ROUND-A/B	AE61-0560/FC-4CO-01-125	COMPCALTE-PACTORY	1230	FACTORY	3 8	9709	****
FAILURE HODE-OUT OF TO DUE TO A FAULTY ROLL TO	TOLENAME - VERNIER ROLL TORQUIMS RATES MERE 45 PCT BELOW MORMAL DURING THE LOW ENCITATION PMARE TORGE ANNLIPTER AND MONITORING VIVE IN THE ASE.	WERE 45 PCT BELOW WE IN THE AGE.	DEMAL DURI	746 THE LO	ž	ITATION PHANE	
BYSTEM EFFECT-OPERATION TOO LOW.	H 700 LOW.						
VEHICLE EFFECT-COMPOSI	VENICLE EFFECT-COMPOSITE RESCHEDULED. A PARTIAL COMPOSITE RETEST MAS REGUIRED.	RETEST NAS REGULAED.					
CORNECTIVE ACTION-THE	CORNECTIVE ACTION-THE FOLL TORGUER AMP, AND VIVM IN THE AGE WIRE REPLACED	WE WINE NEWLACET					1
AUTOFILOT-ROUND-A/B	GR-24-182 SER VO- AMPLIFIEE	FAR 7-41011-877	930	¥	£ 9		44444
FAILURE MODE-FAILED TO APPROPIATE COMMAND INF	TO OPERATE AT PRESCRIBED THE. DURING AN APCHE DECK 15 RUN THE ENGINES WOLLD NOT GINDAL WITH AN INFERSED, FAILURE BELIEVED TO BE DUE TO NO OUTPUT FROM THE BERYON AMPLIFIER RECTION.	AN APCHE DECK 15 RUI TO NO OUTPUT PRON THE	N THE ENGI	NES NOULD MPLIFIER	NOT SECTI	GINDAL WITH IN ON.	
CORRECTIVE ACTION-MOM.	. FAILURE NOT CONTINUED.						
AUTOFILOT-ROUND-A/B	94 -0.4 - 1.99	FAR 7-41011-977	730 610228	Ę	ž o		994389
FAILURE MODE-FAILED 70 FAILED TO ORTSINATE AT	70 OFERATE AT PRESCRIBED TIME, DURING AUTOPILOT LOOP TESTS VERNIER EMGINE 1 AND E PITCH SIGNALS AT THE PRESCRIBED TIME, BELIEVED TO HAVE BEEN CAUSED BY OTHER SOURCES THAN THE AUTOPILOT SYSTEM	AUTOPILOT LOOP TESTS AVE BEEN CAUSED BY OT	P VERNIER	DEINE 1 EN THAN T	7 7 Y	PITCH SIGNALS TOPILOT SYSTEM	
CORRECTIVE . CTION-NOIE.	. CAUSE OF FAILURE COULD NOT BE DETERMINED.	CRHINED.					
AUTOFILUT-ROAMD-A/B	AE81-0033/FC-4CO-01-100	COMPOSITE-PACTORY	1000	F4CTO&Y	99	5/Q s	66474
FAILURE MODE-DRIFT- BU	FAILUME MODE-DRIFT- BUSTAIMER FITCH DEFLECTED A POBITIVE & VOLTB AT 234 MCOMDS. 3.32 VOLTB IS EXPECTED. A VARING P ITCH IEST SIGMAL AMPLITUDE WAS FOUND IN THE GROAND TEST EQUIPMENT.	NOLTH AT 234 SECOND JEPNEWT.	¥ 3:3: 4	Q.73 118 E	E C	ED. A VARING P	
STRIEM EPPECT-ERRATIC	STRIEM EPPECT-ERRATIC OPERATION- VANIMG TERT SIGNAL MOULD INDUCE VARING PITCM PROGRAM.	INDUCE VARING PITCH	PROCHAM.				
VENICLE EPPECT-COMPOSI	VENICLE EPPECT-COMPOSITE DELAYED- POST COMPOSITE TESTS NESE RESUIRED TO FIND SOURCE OF PROSLEM.	IE GENUIRED TO FIND I	TO BORNO	PROBLEM.			
CORRECTIVE ACTION-FLIG	CORRECTIVE ACTION-FLIGHT CONTROL TEST EBUIPMENT MAS IR/D.						 1
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BYBTEX BCB-BTSTER	TERTREPORT HUMBER FALLED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE OIF T	\$17E 71ME 01F	PRI VENDOR NAME OTH VENDOR PART NO	PAP " BO	
UTOFILOT-ROUND-A/B	4A-04-180	FAR 7-41011-\$95	9-50 W	7 K	22		
FAILURE HODE-OUT OF TOLE IEWED DUE TO A MINGH TERT	TOLERANCE, DURING AN APCHE CHECK THE BERYO AMPLIFIER INTRODUCED HDIBE 1NTO THE 28 '7DC BUBB, BEL Test equipiqui failure.	MENNO AMPLIFIER INTRA	SOUCED HOISE	AT OTHE	F 28 '/9C BVE	. BCL	Tiras embelanta Tiraka hilinasa kale wanna
CORRECTIVE ACTION-NOME.	TEST ERUIPMENT PROBLEM INSIGNIFICANT, FAILURE NOT CONFIRMED.	ANT, PAILURE NOT COM	IRMED.				
UTOPILOT-ROUND-A/B	AE81-0011/FC-5CO-G1-024	COMPOST TE-PACTORY	24E 6101E1		9 9		496423
FAILURE MODE-OUT OF TOLE	TOLERANCE. PITCH SERVO BIAS VOLTAGES MENE ABOVE HONINAL-TROUBLE YRACED TO TEST EQUIPMENT.	HERE ABOVE HOHINAL-TI	POWELE SPACE	a to ta	T Equipment.		
STRIES OFFICE-LINFROPER	SYSTEM EFFECT-INFROMER ANALOG SIGNAL-VOLTAGES ABOVE MORNAL,	į.					
WENICLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE RESCHEDULED-RENUM OF COMPOSITE RESULRED.	HOUINED.					
CORRECTIVE ACTION-PLYON	BUCKOUT AMPLIFIER HAS REPLACED.						
ALTER AND SERVOAMP	AESO-1009/PC-ACO-01-108 AMPLIFIER	COMPOSETE-FACTORY	1010		0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0		0.55430
FAILURE MODE-OUT OF TOLE	TOLERANIE-DURING COMPOSITE TEST INCOMPLETE MALLING OF THE PITCH INTEGRATOR WAS NOTE, TRACED TO	PLETE MALING OF THE	PITCH INTES	AATOR 14	S NOTE. TRAC	8 2	
SYSTEM EFFECT-OPERATION	SYSTEM EFFECT-OFERATION TOO HISM-WALL POSITION OF EMSIMES TOO FAB FROM ZERO.	S TOO PAR PROM ZERO.					
WENICLE EFFECT-COMPOSITI	WENICLE EFFECT-COMPOSITE DELATED: GROUND ERUIPMENT MEPAINED AND RETEST OF PLIGHT CONTROL SYSTEM HADE.	NEW AND RETEST OF PLIC	HT CONTROL	BYBTEM >	ADE.		
CORRECTIVE ACTION-MALLING	AMPLIFICE POR PITON INTEGRATOR	NEPLACID.					
ILTER AND SERVOANE	B4-04-131 A4PL[F]&	FAR 7-41011-077	0 02010	0FF UT1	ž Q	,	
FAILURE HODE-SHORT KLEC RE NOT CONTINED.	WELECT?, APCHE TAPE INDICATED 28 VOC SHORT AND NO OUTPUT PROM CHE SERVO ANPL'FIER SECTION. FAILU	MOST AND NO CUTPUT PI	TON ONE BERT	. Wat o	1KA SECTION.		
CORRECTIVE ACTION-UNEHON	RHOMS. CAUME OF FAILUME COULD NOT BE DETERMINED.	OKTERNINED.					
	· Amerikan - Amerikan						
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	DISTINCT TIME REVIEW ACTORICOT BYSTEE-AIRSONAGE	JOPICOT SYSTEM-AIRBO	¥	-			_
STRIEN SUB-BYBIEN	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART HUMBER	VEHICLE DATE DIF	TINE DIF OTH	# 0	VENDOR HANE VENDOR PART NO	
AUTOFILOT-ROUND-A/B	98-04-131 AML 1FIER	F4R T-41011-077	\$30	ETA	ដូទ្ធ		
FAILURE MODE-ERRATIC OUTPUT DURING PERIODS	FAILURE MODE-ERRATIC OPERATIUM-DURING AUTOFILOT FREQUENCY RESPONSE TESTS THE YAW INTEGRATOR GAVE OUTPUT DURING PERIODS OF MO INPUT, FAILURE HOT CONFIRMED, BELIEVED TO BY, IN SOME OTHER PORTIUM OF	PERSPONSE TESTS THE "	IAM INTEGRA	TOR GAVE	INDICAT STRIEN.	INDICATIONS OF MO- BTRTEN.	······································
CORRECTIVE ACTION-UNMODAL	MOMM. CAUSE OF FAILURE COLAD NOT BE DEFENTINED.	DETERMINED.					
AUTOFILOT-FOUND-A/B	AE 60-0541/P1-40E-61-71 SCRWAMPLIFICA, FILTER-SCRIES C	7161	710 601013	1.1 87.0	28	YES GO/CONVAIR	****
FAILURE MODE-ERRATIC .	C OPERATION-AS A RESULT OF THE USE OF A SERIES E FILIER- SERVONMLIFIER PACKAGE, HIGHER PERK-TO- DISPLACEMENTS AND EMAINE DEPLECTIONS MENE EXPERIENCED.	A SERIES E PILTER- M MENE EXPERIENCED.	CANONIME, 1971	ER PACKAL	ž	IGHER MEAK-TO-	
SYSTEM EFFECT-ERNATIC D SLOSM EFFECTS ON THE TERRS.	SYSTEM EFFECT-ERRATIC OPERATION—HIGH AMPLITUDE CONTROL SYSTEM CORRECTIONS WERE MECESSARY TO COMPENSATE FOR INCREASE D SLOSM EFFECTS ON THE MISSILE MAICH MAD BEEN INDUCED BY ADDITIONAL PHASE LAG INMERIT IN SERIES E FILTER SERVOAMPLIF IERS.	TREN CORRECTIONS NERI	E MECESSARY INHERIT IN	TO COST	CKSAT FILT	E FOR INCREASE ER SERVOAMPLIF	
VEHICLE EFFECT-NOME.							
CORRECTIVE ACTION-NONE.	ř.						
AUTOPILOT-ROLNO-A/B	D.246 HISSILE LABILICAL COMECTON	COMPOST 1E-FRD/UPL	3.70 \$009£9	Ξ.	ž 9		****
FAILIME MODE-ERRATIC	FAIL'ME MODE-ERRATIC DPERATION CAUMED BY MATER IN MISSILE UMBILICALS.	C UMILICALS.					
SYSTEM EFFECT-ERRATIC	SYSTEM EFFECT-ERRATIC OPERATION OF BOLL PROGRAM DUE TO INTERMITTENT SIGNAL.	STEAMITTENT BIGMAL.					
WEHICLE EFFECT-COMPOSITE DELAY.	ITTE DELAY.						
CORRECTIVE ACTION-UNBILICALS DRIED OUT.	HUICALS DRIED OUT.	n, pasagramapila confessos. , devicante institución de la confesso			1		
AUTOPILOT-ROUND-A/B	DARSS /83-48N-01-47 COANTAL CABLE	COMPOST TO-PRE/DPL	470	<u> </u>	ខ្ទ		•
FAILURE MODE-ELECTRIC	FAILURE MODE-ELECTRICAL OPEN. BROKEM COAKIAL CABLE.						
NYBIEN EFFECT-INFROME	HYBIEM EFFELT-IMPROPER ANALOG BIGMAL RESULTING IN BE YAM FAULT.	FALLT.					<i></i>
VEHICLE EFFECT-CONFOR	VEHICLE EFFECT-COMPOSITE ASCHIED AND RESCHEDULED. ALL LOOP TESTS UNSATISFACTORY.	SP TEBTS UNSATTSFACTOR	<u>.</u>				
CORRECTIVE ACTION-CABLE	LE MAB REPAIRED.					,	
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	A CONTRACTOR OF THE PROPERTY O			-			7

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DIFFICULTIES REVIEW-AUTOFILOT STRIEM-AIRBORNE

AUTC+11OT-ROUND-A/B FILT R AND BERVOAM	THE PARTY OF THE P	DIF DATA BOURCE				-
AUTCHILOT-ROUND-A/B	FAILED COMPONENT HAMES	FART WUNGER	מעוב מוג יוי	11 O. 1 P.	OIN TENDOR TARE TO	
	##-04-04% ##270me#	FAR 7-41011-977	430 ETR \$00104		763 80	0000
FilLURE MODE-FAIL TO OPERATE AT PRESCRI - SHITCHES MENE DAMAKED AND INOPERATIVE.	OPERATE AT PRESCRIBED TIME- SUB ROUTINE TWO EVENTS DID NOT OCCUR AT SCHEDULED TIME DURING TEST D AND INOMERATIVE.	ME TWO EVENTS DID NO	T OCCUR AT BO	HEDULES	TIME DURING TEST	
COPRECT! VE ACTION-PRECA	IECAUTIONS WERE TAKEN TO AVOID APPLYING OVER VOLTAGES DURING TEST AB THIS MAS THE SUSPECTED CAUS	OVER VOLTAGES DURIN	. TEST AB THE	5	HE BUSPECTED CAUS	
AUTCHLOT-ROLAD-A/B FILTER AND SERVOAN	98-04-031 Amplifier	FAR 7-41011-877	220 ETR 591217		7EB	
FAILURE MODE-FAIL LURIN D No EM A 11EP IMPUT FUNC	FAILURE MOCE-FAIL LIRING OPERATION-DURING PITCH INTERGRATON-SERVO GIMBALLING TEST THE PITCH INTEGRATOR OUTPUT PAILE D Nich a 11EP INPUT FURCTION WAS INFOSED. TRANSISTORS RESISTORS, AND CAPACITORS NERE DESTROYED.	R-SERVO GINBALLING TI TORS: AND CAPACITORS	NERE DESTROY	INTEGA ED.	ATOR OUTPUT PAILE	
CORFECTIVE ACTION-CLOSE	CORFECTIVE ACTION-CLOSE MANELLANCE OF BUB-ABBENT PERFORMANCE MAINTAINED-NO SPECIFIC CAUSE COULD BE DETERMINED.	MANCE MAINTAINED-ND	PECIFIC CAUS	C COULD	. BE DETERNINED.	
AUTOFILOT-ROUND-A/B FILTEF AND SERVOANF	98-04-030 RESISTER METHORK	FAR 7-41011-877	260 ETA 391212		YES 60/C NO	04
FAILURE MOSS-ERRATIC OF NTEAMITTENT OPERATION OF	OPERATION-THE V-1 EMGINE RESPONDED ERRATICALLY DUNING SYSTEM FREQUENCY RESPONSE TESTS DUE TO I OF THE SERVO SUMMING METHORR, POTTED RESISTOR NETWORK SHORTED.	RATICALLY DURTNG SYS' RESISTOR NETWORK SHO	SYSTEM FREGUENCY SHORTED.	2E5POP	SE TESTS DUE TO 1	
COPRICTIVE ACTION-SOVE	COFR.CTIVE ACTION-60/C NAMUFACTURING PROCESSES FOR POTTED CIRCUITS INFROVED. INSPECTION TECHNIQUES IMPROVED.	CIRCUITS IMPROVED. 31	ISPECTION TEC	HNI QUES	IMPROVED.	
AUTOPILOT-ROUND-A/B	FTAREBS/PB-4CO-01-EZ	COMPOSITE-S FACT	220 ETR 590925		7E3 6D/C MO	******
FAILURE MODE-OUT 7.7 SPE	SPECIFICATION, NO BIGNAL FECEIVED TROM PITCH INTERNATOR DURING INTEGRATOR GINBALLING TEAT.	PITCH INTEGRATOR DU	ING INTEGRAT	¥ 5	ALL 186 TEST.	
BYBY:N EFFECT-19FROPER	BYBY:H EFFECT-IMPROPER AMALOS SISMALS. EMSINES DID NOT INDICATE PROJER FITCH CHANNEL INTEGRATOR OPERATION	ICATE PRO ER PITCH CI	IAWEL INTEGR	A TOR Q	ERATION.	
WEMSTLE EFFECT-MOME.						
CORRECTIVE ACTION-REPLA	CORRECTIVE ACTION-REPLACED PLISHT CONTROL PACRAGE AFTER TERT.	ð.,				 3
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BUS-STREE	TEST/REPORT HUMBER FAILED COMPOSENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	1116 DIF 0	PRI VENDOR HAME OTH VENDOR PART NO	1
AUTIVELLOT-ROUND-A/B	F145085/P4-402-00-10 RELAY	TRF	100	14/ETR NO		*****
FAILURE MODE-FAIL TO C M AND YAM INTEGRATORS.	FAILURE MODE-FAIL TO GPERATE AT PRESCRIBED TINE, GYRO TORQUING TEST DATA DURING THE COUNTDOWN INDICATED FAULT H AND YAM INTEGRATORS, INVESTIGATION REVEALED THAT A RELAY IN THE TEST EQUIPHENT MAS NOT FUNCTIONING PROPERLY.	RGUING TEST DATA DURIN Y IN THE TEST EQUIPMEN	NG THE COUNT	DOM INDI	THE COUNTDOWN INDICATED FAULTY PLTC.	
SYSTEM EFFECT-IMPROPER	SYSTEM EFFECT-INFROMER ANALOS SIGNALS. DATA OSTAINED DURING GYRO TORBUING TEST WAS MOT	ING CYRO TORBUING TEST	MA NOT AN	AS EXPECTED.		· · · · · · · · · · · · · · · · · · ·
VEHICLE EFFECT-NOME.						
CORRECTIVE ACTION-INVI	CORRECTIVE ACTION-INVESTIGATED AND DISCOVERED A RELAY IN THE TEST EQUIPMENT MAS NOT FUNCTIONING PROPERLY. RESULTS. F GTRO TORRUING TEST NERE CONSIDERED ACCEPTABLE ON THIS BASIS.	THE TEST EQUIPMENT WAS ASIS.	& HOT FUNCT	TOHING PR	PERLY. REBULTS O	1
AUTOPILOT-ROUND-A/B	AZM-E7-313/FC-4CO-04-E8 MO.1 TAM FEEDBACK TRAMSDUCER	COINORITE-PACTORY	200421	FACTORY YES		
FAILURE HODE-ERRATIC OF GROUND CHARLESTON CH	FAILUNE MODE-ERRATIC OPERATION, A 3.0 YOLT SPIKE ON THE SANDORN RECORDING WAS FOUND TO BE CAUSED BY AN INTERAMITIEN I GROUND COMECTION ON THE CENTER-TAP OF VERNIER NO.1 YAM PEEDBACK TRANSDUCER DURING THE COMPOSITE TEST.	SANDORN RECORDING WAS PEEDBACK TRANSQUEER D	FOUND TO BE	CAUSED BY	an enterantiten est.	
AVSTEN EFFECT-ERRATIC OFERATION.	OPERATION.					
WENICLE EFFECT-COMPONE	WENICLE EFFECT-COMPOSITE RESCHEDULED RE-RUN OF COMPOSITE REJUIRED	ACJUIAED.				
CORRECTIVE ACTION-NOT	RINCHA.					
AUTOFILOT-HOLAD-A/B FILTER AND SCANDAMP	AZM-27-178/FC-4CO-D2-03 FILTER	COMPOST TE-FACTORY 7-41011	30 \$9021£	ž Sį	YES 60/C NO	*****
FAILURE HODE-OUT OF TO WAS CAUSED BY A DEFLET	FAILURE HODE-OUT OF TOLERANCE. LOW GAIM OF THE WEMPIER NO. 1 EMGINE BERNO LOOP IN THE ROLL AXIS HAS INDICATED. THIS WAS CAUSED BY A DEFLETIVE ROLL STABILIZATION FILTER.	D. E EHEINE BERNG LOOP	IN THE NO.	A 4 2 3 14 3	INDICATED. THIS	
SYSTEM EFFECT-IMPROPER	SYSIEM EFFECT-IMPROPER AMALOG SIGMALS. FAULTY FILTER CAUSED THE VERNIER ROLL SERVO LOOP GAIN TO BE TOO LOM.	NED THE VERNIER ROLL S	ERVO LOOP &	AIN TO BE	100 LOM.	
VEHICLE EFFECT-COMPOSITE DELAYED. P. 1E TESTING MAS DEFENDED TO THE SITE.	VEHICLE EFFECT-COMPOSITE DELAYED. POST COMPOSITE TESTING WAS COMDUCTED TO SOLVE PROBLEM. FURTHER STREM AND COMPOSI E TESTING WAS DEFERBED TO THE SITE.	NAS CONDUCTED TO BOLY	F PROBLEM.	FURTHER ST	STEN AND CONPOSE	
CORRECTIVE ACTION-THE	AZP SYRO MAS REMORKED. COMPONENT LEVEL TESTING MAS CONDUCTED.	EVEL TERTING MAS CONDU	CTED.			
AUTOPILOT-POUND-A/B PILTER AND SERVOAMP	98-04-004 ELECTRICAL COMMECTOR	FAR 7-41011-931	108 E	ETR YES		
FAILURE HODE-FAILED TO SERVO AMPLIFIES PACKAGE MARMESS PLUE ARDI AND CA	FAILURE MOS-FAILED TO OMEGATE AT PRESCRIBED TIME- BERVO AMPLIFIER DID NOT DELIVER AMALCG BIGHAL TO BI SERVO VALVE. Seano amplifier package replaced, striem checked correctly, buspect mism contact resistance between bins d or f of Gabres Plug abd cannibler receptacle 1801.	AMPLIFIER DID NOT DEL .Y. BUSPECT HISH CONTA	IVER ANALOG ET RESISTAN	BIGHAL TO	BI SERVO VALVE.	
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..... 113474 96£133 .19644 DIF DATA SOURCE VEHICLE SITE PRI VEHOOR MANE PART NUMBER DATE DIF THE DIP OTH VEHOOR PART NO FAILURE MODE-ERRATIC OPERATION-AT 128 AECONDS A D.P. SECOND TRANSIENT OF D.19 DEGPECS IN NEGATIVE SOCRIER PITCH AND 8-R DEGREES OF COUNTERCLOCKWISE WENTER NOLL MAS MOTED IN THE ENGINE PORTION DATA AND MAS PROBABLY CAUSED BY A MOME NTARY ERROR IN THE PITCH INTEGRATOR. FAILUNE MODE-OUT OF SMECFFICATION OR TOLERANCE, NO TELEMETRY WAS ABOARD MISSILE TO VERIFY FAILUNE MODE, IT WAS DETE THE MISSILE WAS NOLLED PROPERLY BUT MITCHED OVER ABOUT A SMOME AKES. CORNECTIVE ACTION-CANISTER ALIGNMENT PROCEDURES MERE REVISED AND DESIGN MODIFICATIONS ACCOUNTISMED EFFECTIVE ON HIS P/ILUME MODE-OUT OF TOLERANCE. ABMOMBALLY MIGH-AMPLITUDE SE-CPS CLAMED LOOP BOLL OSCIL!ATION, ROLL OSCILLATIONS AT 88 CPS MAD APPEARED TO BOME DEGREE ON OTHER SERIES & PLIGHTS, INDICATING A MARCIMALLY FISH ROLL BAIN AT THIS PRENUEN 2 2 20 11/ETA BYSTEM EFFECT-INFRGMEN ANALOG SIGNALS, WENIGLE HAS COMMANDED TO PITCH IN INFROMEN DIRECTION, VEHICLE EFFECT-IMPROPER TRAJECTORY. CORRECTED BY GUIDANCE STEERING COMMANDS AT 134 SECONDS. Ξ; STATEM EFFECT-ERRATIC OPERATION-A D.R SECOND TRANSIENT IN SCOOTER PITCH AND VERHIER ROLL. 4C 300127 108 108 54120 98 381117 COMPECTIVE ACTION-WONE-FAILURE COULD NOT BE CONFIRMED IN MERVO AMPLIFIER PACKAGE. DIFFICULTIES SEVIEW-AUTOFILOT SYSTEM-AIRSORNE PAILURE MOE-FAIL DURING OPERATION. CONTROL OF BOOATER S IN YAW MAS LOST. WEHICLE EFFECT-COUNTDOMN DELAYED. 183 HINJTES HOLD AND 83 MINUTE RECYCLE. 1317 7.1 ET TELTARENCHT HUNGER PAZLED COMPONENT NAME 25-7-218/72-303-00-04 F1444137F1-E01-00-10 ZC-T-E07/F1-E06-00-8 CORRECTIVE ACTION-REPLACE SERTO CANISTER, GYPYCANI STER BYSTEM CFFECT-INFROMES ANALOG BISMALS. 2C-7-28 CORRECTIVE ACTION-LANGUAL. VEHICLE EFFECT-HOME. 8787EN 848-8187EN AUTOPILOT-ACUAD-A/B AUTOFILOT-ROLAD-A/B FILTER AND SERVORING AUTOPILOT-ROLAD-A/B BILE 13 C AND ON. AUTOFILOT-FOUND-A/8 PILIER AND SERVOAM

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DIFFICULTIES REVIEW-AUTOPILOT STREEM-AINBORNE

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3157E# 848-818TEM	TEST/REPORT HUMBER FAILED COMPOMENT NAME	DIF DATA BOURCE	VEHICLE SITE DATE DATE DATE	PRI VENDOR MANE		
T. SYSTEM EFFECT-ERRATIC OFF COMTROL MOTTOMS, AND ENCE	Y. SYSTEN EFFECT-ERRATIC CHERATION, OSCILLATIONS RESULTED IN MANGINAL BOLL STABILITY, LARGE BOOSTER AND VERNIER EMSIME. CONTROL HOTTOMS, AND ENCESSIVE HYDRAULIC DEMANDS.	ASTINAL BOLL STABIL	.177, LARGE BOOSTE	R AND VERNIER ENGINE	4000	
CLE EFFECT-MOME, MOLL ECTIVE ACTION-A 4CPS	VEHICLE EFFECT-MOME, ROLL CONTROL WAS MARSINAL BURING THE FIRST 44 SECONDS OF PLIGHT. CORRECTIVE ACTION-A ACPS FIRST ORDER LAG FILTER WAS INSTALLED IN BOTH PLUS AND MINUS ROLL CHANNELS ON SUBSEQUENT	IRST 44 SECONDS OF ED IN BOTH PLUS AND	FLIGHT.	ELS ON BUBBERUENT FL		
JOHT VEHICLES. AUTOFILOT-ROAD-A/E	FTA33237PL-204-60-00	COUNTROSA	96. reality -340	AND STREET, ST. Translations	383	ÿ
FAILURE MODE-FAIL DURING OPERATION. BYSTEN EFFECT-OPERATION STOPS PREDA	FAILURE MODE-FAIL DURING OPERATION. BYSTEN EFFECT-OPERATION STOPS PREMATURELY. PLIGYZ CONTROL LOST MCCONTER EMBINE CONTROL.	OST SCORTER ENGINE	COHTROL.			
VEHICLE EFFECT-TOUNTDOMN ABONTED. 8	ABCRTED. 6 NINUTES HOLD.					
AUTOFILOT-ROAD-#78	ZC-7-ED&/F3-ED4-00-4	7.161	49 ETR 54060E 140	763 10	988889	
FAILURE MODE-OUT OF EXPEC TLY CAUSED BY SYSTEM END SISTEM OFFECT-IMPROPER AN E RESPONNE TO THE MISSILE	FAILURE MODE—OUT OF EXPECTED IEST VALUE, AFTER STAGING THE SUSTAINER ENGINE DISPLAYED EXCESSIVE OSCILLATIONS APPARE WILY CAUSED BY SYSTEM END TO END GAINS YET AT TOO HIGH A LEVEL FOR THE MISSILE BENDING MODES EXPERIENCED. SYSTEM EFFECT-IMPROPER ANALOG SIGNALS-SIGNALS SENT TO THE PITCH CONTROLLER WERE AT TOO HIGH A LEVEL CAUSING EXCESSI WE RESPONDE TO THE MISSILE BENDING MODES EXPERIENCED.	SLATAINER ENGINE DI EL FOR THE HISSILE ITCH CONTROLLER NER	SPLAYED EXCESSIVE BENDING NODES EXP IE AT 100 HIGH A L	SECILLATIONS APPARE ERIENCED. EVEL CAUSING EKCESSI		
VEHICLE EFFECT-MOME, NO D BENDIN'S MODES DISAFFEREDED, CORRECTIVE ACTION-FLIGHT VEHICLES, THE RATE GYROS	VEHICLE EFFECT-HONE, NO DETRIBENTA, EFFECTS MERE COSERANED. THE PACILLATIONS DECREASED AS THE PLIGHT PROGRESSED AND ENDIFY: MODES DISAPPEARED. CORRECTIVE ACTION-FLIGHT CONTRO, SYSTEM GAINS MERE CHANGED TO PRECLUDE EXCESSIVE RESPONSE TO BENDIMG MODES ON LATER WEHICLES. THE RATE GYROS WERE ACYED FORMARD ON THE AIRFRAME TO IMPROVE THEIR BENSITIVITY TO VEHICLE BENDIMG MODES.	THE DECILLATIONS DE TO PRECLUDE EXCESSI TO IMPRONE THEIR I	CREASED AB THE PL IVE RESPONSE TO BE HENSITIVITY TO VEH	TENT PROGRESSED AND NOTING MODES ON LATER ICLE BENDING WODES.		
AUTCPILOT-ROUND-A/8 FILTER AND SERVOAMP	FTA 0086/F3-E01-DC-4		48 ETR 560718 -5400	7£3 HÔ		
FAILURE MODE-EARATIC OPERATION. BI PITCH EMG PLUS D.38 DEGREES TO MIMUS D.38 DEGREES. FIR I MOJECATED MON LINEARITY WAS NOTICEABLY LESS	FAILURE HODE-ERRATIC OPERATION. BI FITCH ENGINE MOVEMENT INDICATED HOMLINKARITY ABOUT THE EMBINE ZERO POSITIUM FROM PLUS 0.38 DECREES TO MIMUS 0.38 DECREES, FIRST CHECK MAS PERFORMED AT BOOD PSI HYDRAULICS. ANOTHER CHECK AT SOOD PS INDICATED HOM LIMEARITY MAS HOTICEASLY LESS	DICATED MOMINKARIT PPORMED AT ROOG PRI	IY ABOUT THE EMEIN HTGRAULICS. ANOT	E ZERO POSITICA FROM HER CHECK AT SODO PS		
EN EFFECT-ERRATIC CPE	BVSTEM EFFECT-ERBATIC CPERATION, BL PITCH EMBINE MOVEMENT WAS EBRATIC.	AB ERRATIC.				
CLE EFFECT-COUNTDOM	WENICLE EFFECT-COUNTRIAN DELATED. BO MINUTE HOLD.					
The second secon		AND THE PARTIES OF THE PARTIES OF THE PARTIES OF THE PARTIES OF THE PARTIES AND THE PARTIES AN		3800 3544	7	

GE-GRAL DYNAMICS CONVAIR DIVISION

			the state of the s			
STRIEN SUB 3.03EM	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF TI	811E ME 01F	VEHICLE BITE PRI VENDOR MANE	
CORRECTIVE ACTION UNKNOWN.	NOA.	andriagnas (Production and Control of Contro				•
AUTOPILOT-ROMD-A/B	FTA4081/F3-RCO-01-04	COMPOSITE-B PACT	48 ETR 580708	22		14 600
FAILURE MODE-OUT OF T B TAN SERVO LOOPS WITH	FAILURE MODE-DUT OF TOLERANCE. SUSTAINER ENGINE MOVENENT HAD SCPS OSCILLATION WITH HIGH OVERSMODTS IN BOTH PITCH AN D TAW SERVO LOOPS WITH APPLICATION OF A STEP VOLTSGE TO EITHER SERVO LOOP.	T HAD BCPS OSCILLATION	V 11 11 11 10 0	ER\$#0018	IN BOTH PLTCH AN	
SYSTEM EFFECT-INFROFER	H MALOS BIGNALS.				•	
WENTCLE EFFECT-NOME.						
CORRECTIVE ACTION- NON MONE, DO NOT EXIST WITH T	CORRECTIVE ACTION-NOME. TESTS SHOWED PROBLEM WAS DUE TO SLACK IN GINBAL BLOCK UNDER NO-THRUST CONDITIONS AND SLACK DULD NOT EXIST WITH THRUST APPLIED.	MACK IN GINBAL BLOCK	UNDER NO-THR	UST COM	TIONS AND SLACK	
AUTOFILOT-ROUND-A/B FILTER AND SERVOANT	FTA3070/P1-2CO-01-03	COMPOSITE-B FACT	38 ETR 540415	# 3 3	•	******
FAILURE HODE-OUT OF E HE YAM SERIO LOOP MITH MAS FOUND TO BE THE RE	FAILURE HOLE-OUT OF EXPECTED TEST VALUE, SUSTAINER ENGINE MOVENENT HAD 6 CPS OSCILLATIONS WITH HIGH OVERSHOOTS IN T HE YAW SCRIOCH WITH APPRICATION OF A STEP VOLTAGE TO THE YAW BERVO LOOP. THIS PROBLEM OCCURRED ON HISSILE 48 AND WAS FOUND TO BE THE RESULT OF SLACK IN THE GINDAL BLOCK UNDER NO THRUST CONDITIONS.	AE MOVEMENT HAD 6 CPS (THE TAW BENYO LOOP. THI AMDER NO THRUST CONDITY	SCILLATIONS IN PROBLEM OC IONS.	WITH NIG	OVERSHOOTS IN T	
SYSTEM EFFECT-IMPROPE	STATCH EFFECT-IMPROPER * MALGE SIGNALS, 8 CPS OSCILLATIONS IN THE BUSTAINER YAM SERVO LOOP.	IS IN THE BUSTAINER YAN	SERVO LOOP.			
VEHICLE EFFECT-NONE.						
CORRECTIVE ACTION-NOME.	i					
AUTOFILOT-ROUND-A/B FILTER AND SERVOAMF	FTAESS/FZ-101-00-16 SERVO AMPLIFIER	484	16A 12 360418 -0	12/2TR YI	7E3	463323
FAILURE HODE-FAIL TO UNTDOWN CHECKS.	OPERATE AT PRESCRIBED TIME, THE YAN INTEGRATOR PAILED TO RESPOND TO AN INPUT WOLTAGE DURING CO	# INTEGRATOR PAILED TO	RESPOND TO A	TO-ME H	CLYASE DURING CO	
SYSIEM EFFECT-OFERATION DOES NOT START.	ON DOES NOT START.					
VEHICLE EFFECT-NONE.					,	
CORRECTIVE ACTION-REP	CORRECTIVE ACTION-REPLACED THE BERVO CANIBLER.					 +
AUTOFILOT-ROUND-A/B FILTER AND SERVOAMP	FTAE710/P4-103-00-1\$	FRF	15A ETR \$60322 -11	ETR NO -111,400 NO		
PAILURE MODE-OUT OF S	SPECIFICATION. THE YAW INTEGRATOR GAIN WAS OUT OF SPECIFICATIONS ON THE HIGH SIDE, IT APPEARED GINEEN THE HISSILE AND THE BLOCKHOUSE INSTRUMENTATION WAS THE REASON FOR THE HIGH INDICATION.	INTEGRATOR GAIN WAS OUT OF SPECIFICATIONS ON THE HIGH SIDE, IT APPEARE THE BLOCKHOUSE INSTRUMENTATION WAS THE REASON FOR THE HIGH INDICATION.	THE REABON P	0 HE 1	IDE, IT APPEARED 16H INDICATION.	

GENERAL BYFANICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

9941 MAT 11

GENERAL DYNAMICS

DIFFICULTIES REVIEW-AUTCHILOT SYSTEM-SIRBORNE

		Control of the last of the las	The state of the last of the l			_	
SYSTEM SUB-SYSTEM	TESTAREPORT HUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PAP' AUMBER	VEHICLE BITE DATE DATE DATE	AC DIT	PRI VENDOR NAME OTH VENDOR PART NO		
TOPILOT-ROUND-A/B	2M-7-5E8/FC-1CO-01-11 AWP-1F1ER	COMPOSITE-FACTORY	11A 571122	2.4	₽ 2	31796	
FAILURE MODE-FAIL DURING OPERATIO 01SE AT A FREQUENCY OF 8D CYCLES.	OPERATION-PITCH AND YAM SYRO BIGNAL AMPLIFIER GUTPUTS INDICATED FROM D.8 VOLT TO 1.0 VOLT	AMPLIFICE OUTPUTS	INDICATED FI	104 D.	FOLT TO 1.8 WOLT		
SYSTEN EFFECT-IMPROPER ANALOG SIGNALS.	MLOG SIGNALS.						
WENICLE EFFECT-COUNTDOWN	WENICLE EFFECT-COUNTDOWN OR CONFOSITE DFLAYED OR RESCHEDULED NUMEROUS SUBSYSTEM TEST KERE PERFORMED.	NUMEROUS BUBBYSTER	TEST MERE	PERFORME	÷		
CORRECTIVE ACTION-OUTPUT PROM TI RESULTED FROM 63E INTERFERENCE.	CORRECTIVE ACTION-OUTPUT FROM THE TENGUING AMPS AND CATHODE FOLLOMERS MERE FREE OF NOISE, IT MAS SELIEVED THE NOISE RESULTED FROM 6SE INTERFRENCE.	POLLOMENS WERE FREE	OF NOTSE.	11 148 0	LIEVED THE NOISE		
TOPILOT-HOUND-A/B	E+-7-42&/TC-1CO-01-11	COMPOST TE-FACTORY	11A FA	FACTORY Y	YE B	******	
FAILURE MODE-FAIL DURING MAL AMPLIFIER OUTPUTS AT NT CYROS IS TORGUED TO IT	FAILURE MOE-FAIL DURING OPERATION, CROSS COUPLING OF D.2 VOLTS POSITIVE WAS INDICATED ON THE PITCH AND YAM GYRO SI NAL AMPLIFICR OUTPUTS AT THE END OF ROLL BIAS SIGNAL, THIS CROSS COUPLING IS ONLY PRESENT WHEN ONE OF THE DISPLACEM NY CYROS IS TORGUED TO ITS STOP AT A HIGH RATE.	G.E VOLTS POSITIVE MAS INDICATED ON THE PITCH AND YAM GYRO SI THIS CROSS COUPLING IS ONLY PRESENT WHEN ONE OF THE DISPLACEN	DICATED ON	THE PITCHEN CHE	OF THE DISPLACEN		
SYSTEM EFFECT-IMPROMER ANALOG SIGNALS.	WALOG SI SMALS.	,					
WEHICLE EFFECT-NOME.							
CORRECTIVE ACTION-ANOMALY	CORRECTIVE ACTION-ANOMALY WAS ACCEPTED AS 18. TREF LETTER DATED 16 AUGUST 1957 FROM E.D. STIFTKERT TO M.L. NEWAMM.	TED 16 AUGUST 1857	FROM E.D. S	I-DE CKERT	70 H.L. NEWAH.		
TOFILLT-ROUND-A/B LTER AND JERYGANP	ZH-7-528/FC-1CC-01-11 AMPLFIER	COLPOS I TE-FACTORY	11A 571122	× 2	7.E.S		
FAILURE MODE-FAIL DURING OPERATION. TEGRATORS WERE MULLED AND UMULLED. Y OF THE GTRO SIGNAL AMPLIFIERS.	FAILURE MOE-FAIL DURING OPERATION. TRANSIENT IN THE PITCH AND YAW GYRO AIGHAL ANSLIPIER TRACES WFRE EVIDENT WHEN I TEGRATORS WERE MULLED AND UMULLED. THIS PROBLEM OCCURS BECAUSE OF A SHALL IMPEDANCE MISSMATCH IN THE OUTPUT CIRCUIT Y OF THE GYRO SIGHAL AMPLIFIERS.	nd yaw cyro richal Se of a small imped	ANCE HIBSHA	RACES W	RE EVIDENT WHEN I		
SYSTEM EFFECT-IMPROPER AN	ER AMALOG BIGNALS.						
VEHICLE EFFECT-NOW.							
CORRECTIVE ACTION-SINCE I	CORRECTIVE ACTION-SINCE THE INTEGRATORS WILL NOT BE MULLED IN PLIGHT THE IRREGILARITY NAS ACCEPTED AS 18- REFLETT R FROM L. BOARD TO M.L. MEWAMM.	N PLIGHT THE TRREGL	KARITY WAS	ACCEPTED	AS 18- REFLETT		
TOFILOT-ROUND-A/B	#TAZZ#E/PZ-1CO-01-1D	COMPOSITE-S I NCT	10A ETR 571114		¥6.8		
FAILURE MODE-FAIL DURING	IIME OPERATIOM. TAE ROLL INTEGRATOR DID NOT RESPOND DURING THE TEST.	HOT RESPOND DURING	THE TEST.				
		de general de de de des de			PAGE OFE		

GENERAL DYMHICS CONVAIN DIVINION

13 1W 1888

18 1W 1888	DIFFICULTIES REVIEW-AUTOFILO' BYSTEM-AIRBORNE	OFILO' SYSTEM-AIRBON	¥				,
8797EX 8CB-878TEX	TEST/REPORT NUMBER PA.I.ED COMPONENT NAME	DIP DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	#17E TIME DIF	# 0 # H	VEHICLE BITE PRI VENDOR PART NO	
STRIEM EFFECT-INFROPER	BYBTER EFFECT-INFROMEN ANALOG SIGNALD, RESPONSE IN ROLL CHANNEL HAS NOT PROFER DUE TO FAILURE OF ROLL INTEGRATOR.	HEREL MAS NOT PROPE	1 0 TO FA	ורתוב ס	Mari	INTEGRATOR.	***************************************
VEHICLE EFFECT-HOME,						·	
CORRECTIVE ACTION-REPLA	CURRECTIVE ACTION-REPLACED THE SERVO CANISTER.	manin, ingeninjan paningan dip dipanjan dipanjan dipanjan dipanjan dipanjan dipanjan dipanjan dipanjan dipanja				Tenengaliyaya Tenengalangan pengapan pengapan pengapan pengapan pengapan pengapan pengapan pengapan pengapan p	
UTOFILOT-ROUND-A/B	2%-7-493/FC-1CO-03-14	COMPOST TE-FACTOR !	14A 371014	FACTORY	X OX		26 1000
FAILURE MODE-FAIL DURIN TECRATORS MERE MULLED AM TAY OF THE GIRO SIGHIL A	FAILUSE MODE-FAIL DURING CPERATION-TRANSIENT IN THE PITCH AND YAW GYRO BIGNAL AMPLIFIER TRACES WERE EVIDENT WHEN IN ECRATORS WERE MULLYD AND UN-MULLED. THIS PROBLEM OCCURS BECAUSE OF A SMALL IMPEDANCE MISSMATCH IN THE OUTPUT CIRCUS AY OF THE GYRO SIGNAL AMPLIFIERS.	IND YAW GYRO BIGMAL	AMPLIFIER FEDANCE HIS	TRACES VE		OUTPUT CIRCUE	
STSTEM EFFECT-IMPROPER AMALOG SIGHALS.	AHALOG SIGHALS.						
VEHICLE LIFFECT-HONE.							
CORFECTIVE ACTION-SINCE * FROM L. BOAR" TO H.L.	CURECTIVE ACTION-SINCE THE INTEGRATORS WILL NOT BE MALLED IN PLIGHT THE IRREGALARITY WAS ACCEPTED AS IS. REF LETTE From L. Boarp to H.L. Newman.	IM PLICHT THE 12REC	ALARITY M	S ACCEPTE	9	19. RET LETTE	
UTOFILOT-ROLND-A/B	ZH-7-493/FC-1CO-03-14	COMPOST TE-PACTORY	14A 971014	FACTORY	YES NO		08180
FAILURE MODE-FAIL DURIN MAL AMPLIFIER CUTPUTS AT NI GTROS IS TURGUED TO I	FAILURE MODE-FAIL DURING CPERATION-CROSS COUPLING OF 5.2 VOLTS MOSITIVE WAS INDICATED ON THE PITCH AND TAM GTRO SIG MALAMPLIFIER CUIPUTS AT THE END OF ROLL BIAS SIGNAL. THIS CROSS COUPLING IS ONLY PRESENT MHEN ONE OF THE DISPLACEME IF STROS IS TORGUED TO ITS STOP AT A HIGH RATE.	ALTS POSITIVE MAS IN	DICATED ON	THE PITC	H O	D YAM GYRO SIG THE DISPLACEME	
SYSTEM EFFECT-IMPROPER AMALOG SIGNALS.	AMALOG SIGNALS.						
WENICLE EFFECT-NOWE.							
CCARECTIVE ACTION-ANDNA	CCARECTIVE ACTION-ANDMALY WAS ACCEPTED AS IS. (REF LETTER DATED IS AUGUST 1957 FROM E.	NATED 18 AUGUST 1957	FROM E. D	D. TOECKI	38.T. T.C.	JOECKERT TO M. L. NEWMAN	
U.SPILOT-ROUID-A/B	EH-69414,113-D4-02 8ERVOARY, IFIER	CAPTIVE	2A 571,008	14	¥ 5		***************************************
PAILURE HODE-OUT OF TOL	PAILURE MOE-OUT OF TOLEKANCE. THE VERHIER NO, 1 BERVO BIATIC GAIN ENCEEDED SPECIFICATION, THE NEARINED GAIN NAS B.) DEGYNOLT, WICH 7.04 PLUS OR MINUS 12 PERCENT NAS EXPECTED. NENNIER NO. B. GAIN NAS HIGH BUT IN UPECIFICATION.	IC GAIN ENCEEDED SF. VERMIER NO. R GAIN	ECIFICATIO	N. THE N. TOR.	ANDER COLUMN	D GAIN WAS &.	
BIBTEN EFFECT-OPCHAITON TOO HIGH.	100 HIM.						
WENTCLE EFFECT-NONE.							,
CORRECTIVE ACTION-LANKING	MOI-N.						
managamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagamanagama						PAGE DOBO	
The second contract of							

PAGE 0081

CORRECTIVE ACTION-OUTPUT FROM THE TORBUING DAPS, AND CATHODE FOLLOWERS MERE FREE OF MOISE, IT WAS BELIEVED THE MOIS

R REGULTED FROM SAE INTERPERENCIAL.

EENGALL BYNAHICS CONVAIN DIVINION

9961 MAT 51	DIFFICULTIES REVIEN AUTOFILOT STRIEM-AIRBORKE	PILOT BIBTEM-AIRBOR	7				,
\$121EN \$46-212FEN	TEST/REPORT NUMBER FAILES COMPONENT NAME	DIF DATE BOORCE PART NUMBER	VEHICLE DATE DIF	117E	= ± 5	VEHICLE BITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO.	
AUTOFILOT-ROUND-A/B FILIER AND SERVOAMP	2C-7-0081-8A/P4-1DE-0G-08	7,161	8.A 370023	:	TES 60/0	y	
PAILURE MODE-FA . DURING RATE GYAD AND THE THIRD B	PAILUME MODE-FA . DURING OPERATION. LACK OF A ACPA FILTER IN THE PLIGHT CONTROL SYSTEM CAUSED COUPLING BETWEEN THE RAIL GIRG THE THIRD SENDING MCDE OF THE MISSILE WHICH RESULTED IN 17.5CPB VIBRATION.	M THE PLIGHT CONTRO BULTED IN 17.5CPS V	BRATION.	AUNED CO	Ĭ	0 CTUEEN THE	
STRIEN EPPECT-OPCRATICAL TOO HESE.	100 HE#.		٠				
MENICLE EFFECT-NISSION F MENICENT IN PROPULSION PER THE LOS FLOM TO THE BEG.	VEHICLE EFFECT-HISSION FAILED. PREMATURE BODGIER EMEINE SHUTDOMN, AFTER 43.3 SECONDS OF UPERATION A DROF-OFF OF 70 PRACENT IN PROFUCATOR PERFORMACE OCCURRED AS A RESULT OF LOSS OF MELIUM TO THE B66 REG. REFERENCE SHICH RESTRICTED THE LOS FLOM TO THE B64. THE WHICLE MAS SUBSEQUENTLY DESTROYED BY MASCE SAFETY.	ITDOMN. AFTER 45.3 B	ECONDS OF BGG REG.	OPERATIO Referenci	4 5	CPERATION & DROF-OFF OF 70 REFERENCE SHICH RESTRICTED	
CHEASE THE GAIN METTING OF THE RATE & OF THE MISSILE AT 17.3CPS (IC. "2011)	CHEASTIVE ACTION-INSERTED A ACPS FILTER BETWEEN THE 5180 ANT-LIFIER CUT AND THE INFUT TO THE BERYO ANT-LIFIER AND DE CHEASE THE GAIN SETTING OF THE RATE 6180 TO ELIMINATE THE COUPLING BETWEEN THE RATE 6180 AND THE THIRD BENDING MODE OF THE MISSILE AT 17.5CPS (2C231).	HPLIFIER OUT AND THE	E BHPUT TO	AND THE	\$ 0 \$ 2 \$ 2	LIFIER AND DE BENDING NOVE	
AUTOFILOT GUAG-AZB	28-7-473/75-100-08-08	COMPOSETE-PACTURY	9.A \$70823	FACTORY	÷ 3		1
FAILURY HODE-FAIL DURING OPERATION-ATTEN AND TAM STRO STEMAL AND LOUTPUTS.	FAILURT HODE-FAIL DURING OPERATION-AT BOLL INTERGRATORS UMBRALED. TRANSIENTS MERE OBSERVED ON THE OUTPUTS OF THE PE OF AND TAM STRO SIGNAL AMP. OUTPUTS.	KALED, TRANSIENTS W	ERE COSCA!	£ 8	9	NUTR OF THE PE	
STRIEM EFFECT-INFROPER ANALOG RIGHALD.	STSTEM EFFECT-IMPROPER ANALOS ELSANIS. MENTOLE EFFECT-COMPOSITE DELAYED, RESONDULED-MANEROUS RETESTS NERE PERFORMED IN AN EFFORT TO DETERMENT THE CAUME.	1818 MERE PERTOPHED	IN AN EPFO	# 10 DE	Š	E THE CAUSE.	
CCBRECTIVE ACTION-TORQUE	CCRPECTIVE ACTION-TORQUES ANDLIFIER AND CATHODE FOLLOWER OUTPUTS NERE PREE OF TRANSIERTS. THEREPORE, THE PPOBLEN IS BELIEVED TO ORIGINATE IN THE SGE, THE MESSILE WAS ACCEPTED WITH PROBLEM BTILL EVIDENT.	IPOTS WERE PREE OF TRANSIERTS.	THANSTEAT!). THEAEP.		ME PPOBLEN 18	
AUTOFILOT-HOLKS-A/B	28-7-473/FC-1:CO-08-08	COMPOSE TE-PACTORY	9.4 \$708£\$	FACTORY	Şè		
FAILUME MODE-FAIL DURING OPERATION MOISE AT A FRESUENCY OF 30 CYCLES.	PAILUME MODE-FAIL DURING CPERATION-PITCH AND YAM BYND BIGNAL AMPLIFIER GUIPUTB INDICATED FROM 0.6 VOLT TO 1.6 VOLT DISC AT A FREBUENCY OF 50 CYCLEB.	IL AMPLIFIER CUIPUTS	INDICATE	Face 0.	ğ	1 TO 1.0 WOLT	
SYSTEM EFFECT-INPROPER AMALOG SIGNALS.	MALOG BIGMALB.						
WENTELE EFFECT-COMPOSITI	VEHICLE EFFECT-COMPOSITE DELAYED. RE-SCHEDULED-HANGROUS SUBSYSTEM TEST WERE PERFORMED.	ISTATEM TEST WERE PE	APORNED.				

SEMERAL BYNAMICS CONVAIR BIVIBION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

STATER SIG-BTATER	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	11 DE 11 P	PRI VENDOR NAME OTH VENDOR PART NO	. 9
AUTOFILOT-ROUND-A78 FILIER AND SERVOAME	20-7-201/74-103-00-04 4(PS FILTER	FLIGHT	370611	1.6	YES 40/C	001100
FAILURE MODE-FAIL DURING	FAILURE MODE-FAIL DURING OPERATION, LACR OF A 4 CPS FILTER IN THE PLIGHT CONTROL SYSTEM C. Rate gyru and "Mê Third Bewjing Mode of The Missile Which Resulted in 17.5 CPS Vibration.	IN THE PLIGHT CONTR	OL SYSTEM C	AUSED C	SYSTEM CAUSED COUPLING BETWEEN THE BRATION.	¥
NIBITEM EFFECT-OPERATION TOO HIGH.	TOO HIEF.					•
VEHICLE EFFECT-LOAN OF V	WENICLE BYABILITY. WENICLE MAB DEBTROYED BY RANGE BAPETY AB A REBULT OF THE REDUCED BE	ROYED BY RANGE BAFET	7 AB A RESU	10 1	4E REDUCED BE THRUS	5
CORECTIVE ACTION-INSURT DE REALE THE BATE STRO SA BLE OF 1713 CF3.	CORECTIVE ACTION-INDURT A 4 CPS FILTER BETWEEN THE SYRO ANNLIFIER OUTPUT AND THE 1MPUT TO THE SERVO ANNLIFIER AND DETREAMENT OF THE MENTE OF THE RATE SYRO AND THE BENDING MODE OF THE BLIS. SYS. CTS.	HPLIFIER OUTPUT AND NG BETWEEN THE RATE	THE INPUT T	0 THE 44 C BENGH	CRVO AMPLIFIER AN	A 10 M 1 8 8
AUTOFILOT-ROUND-A/B	EP-347/103-1	CAPTIVE	3.4 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	37C 3-1 0.5	<u> </u>	****
FAILURE MODE FAIL DURING MLANE, THIS COINCIDED NE	FAILURE MOSE-FAIL DURING OPERATION, AN EXCESSIVE DEVIATION OF 0.9 DEGREEB FROM MALL MAS COSCERVED ON BI PLANE. THIS COINCIDES WITH AN EXCESSIVE PRESSURE BURGE IN THE THRUST CHANBER.	OF 0.9 DEGREES FROM THE THRUST CHAMBER.	MAL. 148 0	BSCR-ATD	ON BE IN THE PETCH	
SYSTEM EFFECT-OFFSATIONS MORNAL. NO FURTHER PROB	SYSTEN EFFECT-OFFIATION TOO HIGH. THE MAXIMUM DEVIATION WAS WICH HIGHER THAN THAT SEEN IN OTHER PLANES. RECOMERY WA MORNAL. NO PLATHER PROBLEMS MERE NOTED AFTER THIS TRANSITORY POBITION.	S MICH HIGHER THAN TORY POSITION.	AAT BEEN IN	OTHER	KANES. RECOVERY	<u> </u>
WENTELE EFFECT-NONE.						
COPPECTIVE ACTION-LINEMARK		n ay kilan ngany na sibangan ngang ngapan ngapan ngang sibang ngapan ngapan ngapan ngapan ngapan ngapan ngapan				1
AUTOFILGT-SAUARE-AVB	EPCASA? CHOKE/TRANSFORMER TYPE	UTP-PET 27-04180-1	5 1001) 3	YES OCCO NO 103E1	0.804.
AFLURE FODE-STRUCTURAL-	PAELURE FORE-STRUCTURAL-DURING VISUAL INSPECTION POLLOWING THERMAL BHOCK THE TEST SPECIMEN HAD A HAIRLING CRACK IN THE CARE EXTENDING FROM ONE SIDE TO ONE. DAD OF THE BPECIMEN. CAUSED BY GLASS WARP ONLY PARTIAL COVERING TRANSFORMER.	THERMAL SHOCK THE TI. . CAUSED BY GLASS IM	EST SPECTIVE.	H HAB A	BHOCK THE TEST SPECINEN MAD A HAIRLINE CRACK IN BY GLASS SMAP ONLY PARTIAL COVERING TRANSFORMER	zė
CORRECTIVE ACTION-CAR NO. 6034 MAS : Y EMPECIES BY 18 PER. 64. NEW PET LO NOCH HED). REF. KIETH NO. 551-4-059	I MO. 6034 WAS BENT TO CECO BY 6D/C BUALITY ASSURANCE RESULSTING PROFER CORRECTIVE ACTION. REPL 64. New Pet Lot IF submitted and Mané Pet Rerun. This Lot That Failed is being rejected to ve 1 Mo. 551-4-038	ALITY ASSURANCE REGU E PET RERUM, THS& LO	ESTING PROPI	CA COMM	CTIVE ACTION. RE ING REJECTED TO	ξ¥
AUTOPILOT-BALLARE-AVIS	PPC+S40.1 Transformer	UTP-PET 87-04288-8	* 303189	3/ 0 *	YES TRANSONIC NO 18-3023	
FAILURE MODE-STRUCTURAL-S R. IN THE CASE ON ONE SIDE THE TRANSFORMERS.	FAILURE MOCE-BTRUCTURAL-DURING VISUAL INSPECTION FOLLOWING THERMAL SHOCK THE TEST OPECINEN HAD A OME HALF INCH CRAC I IN THE CASE ON OME AIDE MEAR ITS KDGE-THIS MAS CAUSED BY THE ONISSION OF GLASS MRAPPING DURING THE CONSTRUCTION OF THE TRANSFORMERS.	THERMAL BHOCK THE TI THE CHIBBION OF SLAB	IST OPECINE	A NAD A	ONE HALF INCH CR HE CONSTRUCTION	28
					2800 2974	2

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HANE VAR NO	2 ME 091478	******	2 4 6 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	D/OR RIAL	*04140	A PES PES PIVA	80/g	***************************************	19 5 5 5 5 9	4.
VENDOR I	MG WIRE, (E VICIMITY O D SMALLER B	0£00 1031@	CTIME UNITS THE MOISTU N TERMINALS	FIXTURE AN	0£c0 10323	4.13, ALL BIN SPECI BY THE MOISTURE RES ABETTED BY IMPURITE	FIXTURE AN	ÿ	TER. THES CO. I MEGONA AL CASE, TH	BECIMENS. P
7 E	A A A A	33	INSPE ETHER ETHER	DVENT	99	4.13 87 73 1.48 57	TEST 1715 10	ž 8	3	S S
31 34 II	WINE I	y/9 3	MALLY ATH CYC	0 50 TO	3/93	CAUSED NIO MAS	20 A A A A A A A A A A A A A A A A A A A	y 03	AB 3008 4 400 0	TH THE
DATE DIF TIME DIF	VISED HETHOUSELING OF THE	108069	P. WHILE VI: DLICHING MII ING ELECTRO	ED BY CORRO 1. PREVENTIS -028.	49004	STANCE TEST F. THIS WAS ATIME BUSS	ED BY CORRO	\$306E	K SPECIMENS RANGED FRO DR BOLDERIM	SE RERUN WE
DIF DATA BOMCE PART NUMBER	INE ACTIONS, (E) RE' LIRES TO PREVENT KING TAPED TO THE COIL J	UTP-SUAL/PPT 27-04161-1	INCE TEST, PARA, 4-51 4 SEVERELY ERRODED PO TEST SETUP, PERMITTI 1E MATER.	LLECTROLYSIS INITIATI TO START OF TEST. (2)	UTP-QUAL/PPT E7-04150-1	ION OF MOISTURE RESISTURE RESISTANCE TEST	LECTROLYSIS INITIATI ART OF TEST, Up), PS 551-4-029.	UTP-BUAL/PPT 7-04347	PARA, 4-11; ALL S. DC RESISTANCE WHICH HIS WAS CAUSED BY POR HUATE FOR THE JOB.	24-9-65. PPT 18 TO
TEST/REPORT NUMBER PAILED COMPONENT NAME	CORRECTIVE ACTION-OECO 13 TO FURNISH THE FOLLOWING CORRECTIVE ACTIONS, (5) REVISED METHOD OF STRIPPING MIRE, (2) ME ASURES TO PREVENT THE WIRE FROM SEING STRESSED AND (3) MEASURES TO PREVENT KINNING OF THE WIRE IN THE VICINITY OF THE COMMECTION, ED.Y. FUTHER BICCHMERDS THAT THE COMMECTION BE TAPED TO THE COIL AND THAT NO. 40 WIRE AND SMALLER SHOWL. B NOT BE ROUTED ACROSS A SOBBIN FLANGE, REF. CTCHT NO. 531-4-030.	FRESCADEE.1 TRANSFORMER	SPECIFICATION. DURING MOISTURE RESISTANCE TEST, PARA, 4.12, WHILE VISUALLY INSPECTING UNITS, SI AT LEAST ONE PIN OF EACH TEST SPECIMEN SEVERELY ERRODED FOLLOWING MINTH CYCLE OF THE MOISTURE N NAS CAUSED BY THE MOISTURE RESISTANCE TEST SETUP, PERMITTING ELECTROLYSIS BETWEEN TERMINALS AND USS AND WAS ABETTED BY IMPURITIES IN THE WATER.	. TEST PROCEDURE WAS REVISED TO PREVENT ELECTROLYSIS INITIATED BY CORROSION OF TEST FIXTURE AND/OR WATER BY, (1), CLEANING SURFACES PRIOR TO START OF TEST. (2), PREVENTION OF ADVENTITIONS MATERIAL OF CONDUCTOR TO SIMILATE USE CONDITION. SSI-4-028.	FRS9CLOGF.x TRANSFORMEN	FAILURE MODE— OUT OF SPECIFICATION. DURING VISUAL INSPECTION OF MOISTURE RESISTANCE TEST, PARA, 4.13, ALL SIN SPECI MENS HAD ALL THEIR PINS SEVERELY ERRODED FOLLOWING THE MOISTURE RESISTANCE TEST. THIS HAS CAUSED BY THE MOISTURE RES ISSANCE TEST TETUP, PERHITTING ELECTROLYSIS BETWEEN TERMINALS AND ALUMINAM MOUNTING BUSS AND HAS ABETTED BY IMPURITE ES IN THE MATER.	TEST PROCEDURE MAD REVISED TO PREVENT CLECTROLYSIS INITIATED BY CORROSION OF TEST FIXTURE AND/OR 1 BY, (1). CLEANING SURFACES PRICE TO START OF TEST. (2). PREVENTION OF ADVENTIVIOUS MATERIAL. (3 ENCTOR TO SIMILATE USE CONDITION, REF. 551-4-029.	FRESCAESE-A TLANSFORMER	FAILURE MODE- OUT OF SPECIFICATION. DURING IMMERSION TEST, FARA, 4.11, ALL 3,X SPECIMENS ABSORBED MATER. THIS CONDI 17,3M LAS INDICATED BY AN DUT OF SPECIFICATION COIL TO CASE DC RESISTANCE WHICH RANGED FROM 400 CHMS TO 1 MEGOMM FOR 1/4 LEAST ONE COLL AND CASE OF EACH STRESS SPECIMENS, THIS MAS CAUSED BY POOR SOLDERING OF THE METAL CASE, THE CASE MOT BEING MCINER WILLD, AND THE MOLDERING IRON NOT ADERUATE FOR THE JOB.	COMMECTIVE ACTION-THE CAMES AND LIGH ARE TO BE BOLDERED PLATED AND AN IRON OF 100 WATT MINIMUM IS TO BE UNED. THE A OVE REGUIREMENTS HAVE BEEN ADDED TO NAMERACTURING DRAWING R4-8-85. PPT IS TO BE RERIN WITH THE HEW DPECINENS. REF. TENT HO. 551-4-023.
8757EM 8UB-8757EM	CORRECTIVE ACTION-OECO I ASURES TO PREVENT THE MIRI E CONNECTION, ED/L FUTHER B NOT BE ROUTED ACROSS A I	AUTOPILOT-SelaRE-A/B	FAILURE HODE-OUT OF SPEC R TEST SPECIPENS HAD AT LI ESISTANCE TEST, THIS MAS ALUMINUM MOUNTING BUSS A	CORRECTIVE ACTION- TEST INFORMATER 1. (3). INSULATION OF COMP.	AUTOPILOT-SQUARE-A/B	FAILURE MODE- OUT OF SPEC MENS HAD ALL THEIR PINS SI ISTAMEE TEST FILM: PEKHI ES IN THE WATER:	CORRECTIVE ACTION— TEST PROCEDURE MAS INFORMATION IN MATER 87, (1), CLEANING), INSULATION OF COMMUTOR TO SEMEARE	AUTOF 11 01 - SQUAKE - A/8	FAILURE MODE- OUT OF SPE T7.36 JES INDICATED BY AN G7 LEAST OME COLL AND CAS DE MOT BEINS BCLDER PLATE	CORRECTIVE ACTION-THE CA BOYE REGUIREMENTS HAVE BE GTCAT HO. \$51-4-023.

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

AYETEN BUB-BYATEN	TENTARFORT NUMBER DIF DATA BOURCE Y FAILED COMPONENT NAME FART MUMBER D	DIF DATA BOURCE PART MUNDER	THICLE ATE DIF	817E	PRE VENDOR MANE OTH VENDOR PART NO	
AUTOFILOT- SQUARE-A/2	##C4713.1 TRAMSFORMER	UTP-BUAL/PPT R7-54384-1	4300£7 60	3/03	TES 60/C NO 27-04384-1	****
FALLURE MODE-STRUCTURAL, ALL SIX TE 4.12 PMCRMAL SMOCK TEST, TRIS MAS C. REDUCED SCLOM MARGINAL REGUIREMENTS.	TURAL, ALL BIX TEBI SPECIMENS MAD CRACKS LOCATED ON BIDES AND CORNERS WHICH OCCURRED DURING PARA. Tebi. Tris was caused by Terminal Birips Beifs Misalished. Encapsulation Material Thicaness was takenered?	LOCATED ON SIDES AN 18 BEING MISALIGHED.	D CORNERS WE ENCAPSULATED	HCH OCCU	RRED DURING PARA. AL THICKNESS MAS	
CORRECTIVE ACTION-AN A ON SLIPPING OUT OF ALIG F. CTCIN NO. 331-4-026.	AN ALIGNING JIG HAS BEEN BUILT MHICH WILL PREVENT BOTH THE TERMINAL STRIPS AND THE TRANSFORMER Alignment while the admessive cumes, use of jigs will be required by general construction spec. Org.	L PREVENT BOTH THE T OF JIGS WILL BE RESU	ERMINAL STRI IRED BY GEME	PS AND 1	STRIPS AND THE TRANSFORMER FR GEMERAL CONSTRUCTION SPEC. RE	•
AUTOFILOT-SALARE-AAT	69CAEAR.1 TRAMSFORMER	UTP-QUAL/PPT ET-04173-1	650627 GQ	2/03	YES 60/C NO 27-04173-1	:
FAILURE MOC-ELECTRICAL 18 MAS CAUSED BY EXCESS!	FAILURE MOC-ELECTRICAL OPEN, DURING PARA 4.10 FOLLOMING THERNAL SMOCK, TWO SPECINENS MAD PRIMARY WINDINGS OPEN. IS MAS CAUSED BY EXCESSIVE TENSION ON MO. 46 WIRE DURING WINDING.	HERMAL SMOCK, THO SP HDIME.	ECTNENS HAD	FIRE	WINDINGS OPEN. TH	
CORRECTIVE ACTION-1) T PCED REDUCED FROM MACH 168. 4) BCDDIN INSPECTE ERCYNEGTION, 6) INTERL	CORRECTIVE ACTION-1) TENSION ON NO. 46 WIRE REDUCED TO 0.03 POUNDS AND MEASURED USING A GRAINES GUAGE. 2) WINDING S PEED REDUCED FROM MACHINE SETTING OF TO TO 55 MAX. 3) JIG NADE AND INSTALLED ON MACHINE TO MAKE INTERCONDECTIONS EAS 1CR. 4) BODDIN INSPECTED UNDER 25 POMER HICROSCOPE TO INSUME CONPLETE DEBURRING. 5) NO. 46 WIRE NOT STRIPPED FOR INT EXCHARCITON, 6) INTERLAYER WARPED TAPE REVERSED TO PREVENT BONDING TO NO. 46 WIRE, REF CICTH NO. 551-4-027.	S POMOS AND MEASURE UNDE AND INSTALLED ON E COMPLETE DEBURRING IT BONDING TO NO. 46	D USING A GR MACHINE TO . 53 NO. 46 WIRE, REF CT	AMES GA MAKE INT WINE MOT	AGE, ET WINDING S ERCONNECTIONS EAS STRIPPED FOR INT \$51-4-DET.	
AUTOPILOT-SQUARE-A/B	ESC4230.1 Transformen	UTP-QUAL/PPT 35-01133-1	650617 60	2/93	YES 60/C NO 55-01133-1	***************************************
FAILUNE MODE-OUT OF TO ENEMIE FOR THREE SAFE CAUSED BY PROBLEMS IN-FE	F FOLERANCE, DURING VISUAL INSPECTION PARA, 4.1, DINENSIONAL OUT OF TOLERANCES FOR DATA SHEET REF. SPECIMENS MEASURED LIMIT IS 0.30, THIS MASINGENT IN VACUAM IMPREMATION AND FOTTING PROCESS.	RA. 4.1. DIMENSIONAL D.106 INCHES, WHERE ING PROCESS.	OUT OF TOLE THE REQUIRED	AAMCES P	OR DATA SHEET REF S 0.30. THIS WAS	
COSRECTIVE ACTION-GENE F. CICIN NO. 331-4-023.	CORRECTIVE ACTION-GENERAL CONSTRUCTION SPEC REVISED 31 AUGUST 1965 TO ADD REQUIREMENT TO MEET INSERT DIMENSTONS, RE . CTCTH NO. 331-4-023.	UST 1965 TO ADO REQU	IRENENT TO P	EET THSE	PT DIMENSTOMS. HE	
AUTOFILOT-SOUARE-A/B	FR69CAESE.1 TRANSFORMER	UTP-BUAL/PPT 7-04347	850817 60)/Q3	7E8 60/C	:
FAILURE MODE-OUT OF TOLES TA BMELT REF. B.C.F AND J. B THE EDGES AND ON TOP ON PRESENT ON THE SPECIHENS.	T TOLERANCE, GURING VISUAL SUSPECTION TEST, PARA 4.1, DINENTIONAL OUT OF TOLERANCES EXISTED IN DA AND J, FOR T TEST SPECINGHAND EXISED IN DAS OUT OF TEST SPECING HAS ROUGH AND RAISED AROUNT OF OR (B) THE SPECINGN WAS NOT CONSTRUCTED TG PRANTING. IN ADDITION, NO VENDOR IDENTIFICATION WAS THEMS.	31, PARA 4.1, DIMENT AUNED BY. (A) CITHEN TED TG DRAWING. IN A	TOWAL OUT OF SOLDERING N DDITTON, NO	TOLERAN	CES EXISTED IN DA AND RAISED AFCHM DENTIFICATION WAS	
CORRECTIVE ACTION-CONT	CMIIMUE PPI, EXCESS MEIGMT WILL MOT APPECT TEST, CANS HUST BE WORKED TO SCECIPIED DIMENTIONS BEP NS WERE REIDENTIFIED PER 60/C APPROVED METHOD, REP, CTCIM NO 551-4-024.	ECT TEST, CANS HUST METHOD, REF, CTCTH H	BE WORKED TO 0 551-4-024	9FEC1F1	ED DIPENTIONS BEF	
					PA6E 0095	

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****	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT BYSTEN-AIRBOR	¥		_
#73:44 #3:44-404	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE PRI	PRI VENDOR MANE OTH VENDOR PART NO	·
AUTOF11.01 - SAUMRE - A/B	27-04392-1 Transformen	UTP-PET B7-04308-1	650618 60/C YES	YES SERVOMECHANISH NO S SSERSS SERT PULLED 'OCAE A	:
FALLURE MODE-BTRKT VARL. D THE FIXTURE MADE AN II D BY POOR ADHESION BETM	FAILUME, MODE-STRUCTURAL, DURING MY LOT 3 MAKEN STRUMNIN TEST, FARM, WIRE INC. THE STRUCTURAL, DURING MY LOT STRUCTURE MADE AND IMPRESSION IN THE POTTING MATERIAL AS A TORGUE OF R.O. POUND-INCHES MAS APPLIED. THIS WAS CAUSED BY POOR ADMESTON BETWEEN POTTING MATERIAL AND IMSERTS.	A TOREUK OF E.O PC	WE-INCHES MAS APPLIES	THIS MAS CAUS	
CORRECTIVE ACTION-CAR SE ON OF RECONTABLIATION IN	CORRECTIVE ACTION-CAR SPEA SENT TO VENDOR WHICH ESPECIALLY CHECKS FOR CLEANING OF INSERTS PRI H IN OF RECONTAMINATION IN PROCESS BY HELEASE AGENTS IN USE, REF. CTCTH NO. 551-4-022.	CHECKS FOR CLEANING EF. CTCTH NO. 551-4	OF INSERTS PRI A TO .	TO USE AND PREVENTS	
AUTOFILOT - SAUARE - A/B	FR2 7C4493 TRAHSF GRMER	UTP-PET E7-04163-3	850811 60/C YES	YES DECO	••1703
PAILUME MODE-STRUCTURAL. IN TO PULL OUT OF 4 SMECTM IAL TO INDERT.	FAILUME MODE-ATRUCTURAL. DURING INSERT STRENGTH TEST, PARA, 4.12, THE POTTING FATERIAL CRACKED AND THE INSERTS SEGA IN TO PULL OUT OF 4 SMECIMENS REPRESENTING LOTS 37, 39, 40, AND 41. THIS IMS CAUSED BY POOR ADMESION OF POTTING MATER IAL TO INSERT.	4.12, THE POTTING ND 41, THIR WAS CAL	NATERIAL CRACKED AND 1 ISED BY POOR ADMESTON (ME INSERTS BECA F POTTEME MATER	
CORRECTIVE ACTION-100 PR BOR HAD ALREADY CORRECTI . CYCTH NO. 351-4-021.	CORRECTIVE ACTION-100 PERCENT CHECK OF LOTS HECEINED ARE HOW PERFORMED AND UNITS PAILING ARE REJECTED TO VENDOR. WE Hook had already corrected hamfacturing procedures and deco vafs approved to correct prolens in potting resin. Ref . Cycth ho. 351-4-021.	W PERFORMED AND UNI	TB PAILING ANE REJECTE CARECT PRODLENS IN POI	D TO VENDOR. VE TING RESIN. REP	
AUTOPILOT-SAUARE-A/P	FRESCA248.1 Transforce	UTP-QUAL/PPT E7-041E6-1	43DBD4 GD/C YES	3/03	***
FAILURE MODE-STRUCTURAL, DURING VISHA. B MAD CRACKS, THIS MAS CAUSED BY IMPRO	FAILURE MODE-STRUCTURAL, DUZING VISUM. INSPECTION, FOLLOWING THENHAL SHOCK TEST OF PARA, 4.1; MB HAD CRACKS. THIS MAS CAUSED BY IMPROPER METHOD OF APPLYING GLASS MAP DURING CONSTRUCTION.	G THEHMAL SHOCK TES	THENHAL SHOCK TEST OF PARA, 4.12.2, THREE TEST SPECINE GLASS WRAP DURING CONSTRUCTION.	EE TEST SPECIFIE	***************************************
CORRECTIVE ACTION-MEALIN	CORRECTIVE ACTION-SEALING TEST RERAN FOR CONFIDENCE AND NETHOD OF APPLYING GLASS WRAP WILL BE MODIFIED TO PRECLUDE M: Surface Cracking of Poffing Material, REP. CTCTH NO. 331-4-020.	HOD OF APPLYING GLA	SS HEAP WILL BE HODIF!	ED TO PRECLUDE	
AUTOFICOT-SQUARE-F/B	69C4E4E.1 Transformer	UTP-QUAL/PPT E7-04173-1	#50#07 50/C YES	YES 40/C HO 87-04175-1	•
FAILURE MODE-ELECTRICAL	IAL OPEN, DURING WINDING CONTINUITY CHECK FOLLOWING INMERSION TEST, PARA, 4.11.11, THE PRIMARY WITEST SPECIMENS WERE FOUND OPEN, CAUSE HAS NOT RNOWN.	CK FOLLOWING IMERI MRS NOT KNOWN.	JON TEST, PARA. 4-11-1	. THE PRIMARY W	
CORRECTIVE ACTION-A CLOSE C USED IN CONNECTING THE COIL ON THE FINE COIL LEADS. THE -4-019.	CORRECTIVE ACTION-A CLOSE CONTROL IS MADE ON THE WINDING TENSION OF THE ULTRA FINE USED IN COMECTING THE COLL TO THE TERMINAL LEAD HAS BEEN MODIFIED TO INSURE A SOOD ON THE FINE COIL LEADS. THE MODIFICATIONS WILL BE DOCUMENTED ON A VAF AND SUBMITTED -4-918.	NSICN OF THE ULTRA DIFIED TO INSURE A ON A VAF AND BUBH	FINE WIRE IN 1-E MINDING. THE GOOD TERMINATION WITH MINIMM TIED FOR APPROVAL. REP. CTCTM	ME, THE METHOD MINIMUM STRESS , CTCTH MO, 885	
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18 JUN 11888

18 Jun 1988	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	PILOT SYSTEM-AIRBOR	9				
ATATEN BUB-ATATEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SCHICE PART HUMBER	VEHICLE DATE DIF	817E 110E 01F	A CO	VENDOR NAME VENDOR PAR! NO	
AUTOF1.01-14UARE-A/8	69C4E4E-1 TRANSFORMEN	UTP-BUAL/PP7 E7-04178-1	650707	3/gs	7ES 50/0	\$0.0 27-04173-1	:
FAILURE MODE-OUT OF TOLE TOLERANCES FOR DATA SMEET RIMS MANUFACTURE.	TOLERANCE, DURING PARA, 4,1, VIBUAL INSPECTION, THREE TEST SPECIMENS WERE DIMEMBIONALLY OUT OF SMERT REFERENCES R, L, AND B, THIS WAS CAUSED BY THE TEFLOM MOLD PLATE PEING OUT OF TOLERANCE DU	PECTION, THREE TEST AUSED BY THE TEFLOM	SPECIMENS HOLD PLATE	WERE DIN	2 4 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	MALLY OUT OF TOLERANCE DU	
CORRECTIVE ACTION-MONE O	CORRECTIVE ACTION-MOME OF THE DIMENSIONS ARE CRITICAL AND NO CORRECTIVE ACTION IS DEEMED MECESSARY. DEFECTIVE PARTS MERE REPLACED BY 31 JULY 1965, REF. CTCTH NO. 551-4-018.	O CORRECTIVE ACTION	13 DEEMED	NECESSARI	. DE	ECTIVE PARTA	
AUTOFILOT-SQUARE-A/B	69C4245.1 Transformer	UTP-QUAL/PPT E7-04170-3	650706	2/03	YES 60/C	60/C 27-04170-3	74.1.1
FAILURE MONE-OUT OF YOLE ECTION. ONE SPECIMEN MAS OTHER UNIT HAD 7 THEEADS THE INSERTS.	FAILURE MONE-OUT OF YOLERAWIE, THREE TEST SPECIMENS MAD DIMENSIONAL OUT OF TOLERANCES DURING PARA, 4.1, VISUAL INSP CITION, OME SPECIMEN MAS 5.01 POUNDS OVER THE REQUIRED MEIGHT OF 0.10 POUNDS MAXIMUM, OME UNIT HAD 8 THREADS AND THE OTHER UNIT HAD 7 THREADS MHENE 8 THREADS MINIMUM IS REQUIREDENT FOR INSERTS, THIS MAS-CAUSED BY POITING MATERIAL IN THE INSERTS.	ENSIGNAL OUT OF TOLI T OF 0.10 POUNDS MA NENT FOR INSERTS. TO	CRANCES DUR SINUM. ONE (18 MRS CAL	ING PARA. UNIT HAD SED BY PC	4 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	VIBUAL INSP EADS AND THE MATERIAL IN	
CORRECTIVE ACTION-POTTIN 31-4-015.	CORRECTIVE ACTION-POTTING LANGRATORY INSTRUCTED TO REMONE ALL POTTING THAT MAY GET IN THE INSERTS. REF. CTCTH NO.	LL POTTING THAT MAY	6ET IN THE	INSCRTS.	Æ.	СТСТН НО. 3	
AUTOFILOT-SAUARE-A/B	FR 69C 4267.1 TRANSFORMER	UTP-9UAL/PPT 27-04187-1	45070e 6))	YES 60/C	Ų	***************************************
FAILURE MODE-OUT OF TOLE D ON FOUR SPECIMENS FOR D MAXIMUM. THIS WAS CAUSED	FAILURE MODE-OUT OF TOLERANCE, DURING VISUAL INSPECTION TEST, PARA, 4.1, DIMENSIONAL OUT OF TOLERANCES MERE OBSERVE D ON FOUR SPECIMENS FOR DATA SHEET REFERENCE M, ALSO ON HIGH SIDE (APPROX D.22 LB) OF WEIGHT REGUIRENENT OF 0.10 LBS MAXIMUM, THIS WAS CAUSED BY TEFLON MOLD PLATES BEING MONN OUT AND A SPEC, CONTROL DRAWING ERROR.	I, PARA, 4.1, DIMENI SIDE (APPROX D.EZ I UT AND A BPEC, CONT?	HOWAL OUT B) OF WE16 FOL DRAWING	OF TOLERA	ENENT	WERE COSERVE OF 0.10 LBS	
CORRECTIVE ACTION-TEFLON	COMPECTIVE ACTION-TEFLON PLATES RECPECKED AND OUT OF TOLERANCE PLATES DISCARDED AND REPLACED. SPEC. CONTROL DRANING WAS CORRECTED TO READ HAX D.25 LBS. REF. CTCTH NO. 351-4-013.	NCE PLATES DISCARDET 3.	AND REPLA	CED. SPEC	8	TROL DRAWING	
AUTOFILOT-SEUARE-A/B	FRESCADAGE TYPE CHCKE-TRANSFORMER TYPE	UTP-QUAL/PPT 27-04160-1	65070£	2/9	3 3	5/Q9	*******
FATLURE MODE-OUT OF TOLE EET REFERENCE 6 MO L ON A ANGTER OF BUTTON.	TOLERANCE. VIBUAL INSPECTION, PARA, 4.1, DINENSIONS MERE CUT OF TOLERANCE DESIGNATED BY DATA SH. . OH MOST OF BEVEN SPECIMENS. THIS MAS CAUSED BY MORN TEPLON PLATES WHICH CONTROL SPACING AND DI	, DINENSIONS WERE CA AUSED BY WORN TEPLO	IT OF TOLER	ANCE DESI	Cesa TC	D BT DATA SH ACING AND DI	
CORRECTIVE ACTION-TEFLON	COMMECTIVE ACTION-TEPLOM PLATES THAT MERE OUT OF TOLERANCE MERE REPLACED, REP. CTCTH. NO. 551-4-214.	MERE REPLACED. REF.	CTC 18, 80.	181-4-01	į		
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GENERAL DYNAHICS CONVAIR BIVISION

BY BY EX.	FAILED COMPOSENT NAME	DIF DATA SOURCE	VEHICLE DATE DIF TO	817C ME DIF	SITE PRI VENDOR NAME	¥ _
AUTOFILOT-SQUARE-A/B	FR80C4248.1 Transforier	UTP-QUAL/PPT 87-04186-1	450701 66	3/9 3	7E8 60/C	
FAILURE MOC-OUT OF TOLE RANCES IN DATA SMEET REF. COULD NOT BE THREADED I POSITION INSERTS HAD COL	FAILURE MODE-OUT OF TOLERANCE, DURING VISUAL INSPECTION TEST, PARA, 4.1, SEVEN SPECIMENS MAD DIMENSIONAL OUT OF TOL ERANCES IN DATA SHEET REFERENCES 5 AND J. IN GENERAL MOST INSERTS ALSO MAD (1) EXCESS RESEN IN THE INSERT, (2) SCREW S. COALD MOT BE THREADED INTO INSERTS. (3) INSERTS SET INTO POTTING AT 3 DECRIES ANGLES OR MOME. TEFLON PLATE USED TO POSITION INSERTS HAD COLD FLOWED DUE TO AGE.	EST, PARA, 4.1, SEVE) HSERTS ALSO HAD (1) POTTING AT B DEGREE	EXCESS RESIN	AD DIME IN THE	INSERT. (2) S. FLOR PLATE USE	A 25 0
CORRECTIVE ACTION-PPT TE	CORECTIVE ACTION-PPT TESTS CONTINUED. ST 31-7-65 THE BIDS FROM 780-2-42 MERE OBTAINED AND REPLACEMENT OF MORN OUT EFLON PLATES MAS COMPLETED. REF. CTCTH NO. 351-4-012.	1 FROM 780-2-42 MERE	OBTAINED AND	REPLAC	ENENT OF MORN	ā
AUTOFILOT-SEUARE-A/B	FRETCAASE.1 TRANSFORMER	UTP-PET E7-04179-5	450527 60	3/0 3	7£\$ 60/C NO	***************************************
FAILURE MODE-STRUCTURAL, DURING PE' E SECOLOS MHIE THE SMECHEN MAS IN ACE INMEMPECTION ABOUT 4 HILS DEEP.	FAILURE MODE-STRUCTURAL, DURING PET LOTS R AND 3, THE TEST SPECIMEN HAD BUBBLES APPEAR AT A RATE OF ONE EVERY TURLY E SECONDS NAILE THE SPECIMEN NAS INMERSED IN 85 DEG C NATER DURING PARA 4.2, BEALING TEST, THIS NAS CAUSED BY A SURF ACE INMERFECTION ABOUT 4 HILS DEEP.	T SPECIMEN HAD BURBLED APPEAR AT A RATE OF ONE EVERY THELY R DURING PARA 4.2, BEALING TEST. THIS WAS CAUSED BY A SURP	a APPEAR AT	THIS T	OF ONE EVERY TO) j
CURRECTIVE ACTION-NOME.	CHRECTIVE ACTION-NOME. THE HOLE WAS OPENED TO PREVENT AIR ENTRAPHENT, RETESTED AND NO BUBBLES SPPEARED. ENTIRE LOT . R. AND 3 WERE SUBJECTED TO SEALING TEST AND ALL PASSED, REF. CTCTH NO.551-4-011.	T ENTRAPHENT, RETESTE FF. CTCTH NO.351-4-01	D AND NO BUE 1.	BLES CA	PEARED. ENTIRE	ğ
AUTOPILOT-SQUARE-A/B DMARA	5LV-90-64-5033F 34R0-D10DE	FAR 48-42002-3	4503E0 WTR	æ	YES TEXAS INSTRUME NO HTS	10E 885014
FAILURE MODE- ERRATIC OF ORENTARY SHORE RE PRETING TRANSFER TO INTERNATIONAL MODES STEAMES TOWN TO THE INTERNITTENT	FAILURE MODE- ERRATIC OPERATION, DURING PERFORMANCE OF DRL PROCEDURE 27-94445 SPIN-MOTOR ROTATION-DETECTOR ISHED) N OMENTARY DROPOUTS WERE RECEIVED FOR APPROXIMATELY 25 MINUTE PERIODS FROM THE TIME TWE PACKAGE WAS STATED UNTIL THE FIRST TRANSFER TO WINERMAL FOMER, THE FAILURE MAS CONFIRMED. THE EXACT GAUSE OF THE INTERHITTENT 3-WED DROPOUT IS MOT FINGAN, BUT MOISE SIGNALS GENERATED IN THE POSER SUPPLY, PUN 27-41382-3 S/N 59A, WERE FOUND TO BE THE MAJOR CONTRIBU- TORS TO THIS INTERHITTENT SHALD PROBLEM, AZPLACIME POMER SUPPLY BOARD WITH DIFFERENT DICOES ELIMINATED FAILURE.	PROCEDURE ET-94443 FRERIOSS FROM THE TI THE EXCY CAUSE OF IN ET-41382-3 S/N 594	SPIN-MOTOR R WE THE PACKA THE INTERNI TA WERE FOUND RENT DIODES	OTATIO CE VAS TIENT 7	HOETECTOR ISHRD) N STARTED UNTIL THE HRED DROPOUT IS NOT THE NAJOR CONTRIBU	E SE
CORRECTIVE ACTION-RAR BL DES PROH IN 1616 TO TH R? TO USE A HIGH RELIABILITY	CORRECTIVE ACTION-RAR BLV-80-04-8034 RECOMMENDED CHANGING DIODES. CIC 07988 CHANGED FOMER SUPPLY (P/N 27-41382) DIO DES PROM IN 1818 TO TH 27 TYPES ON ATLAS/CENTAUR BOOSTERS. A PERMANENT CHANGE (ECP 7983,7388) IS BEING INCORPORATED. TO USE A HIGH RELIASILITY REFLACEMENT DIODE (183841) FOR THE (TM27) DIODE.	DICDES. CIC 07998 CH A PERHANENT CHANGE HE (TMRT) DICDE.	ANGED POMER ECP 7583,734	3. 18 E	(P/N E7-4138E) EING INCORPORA	0 g
AUTOPILOT-BOURE-A/B	R7C4403 Transfoner	UTP-PET E7-04178-1	***************************************	3/08	YES OECO NO 7340	
FAILURE MODE-STRUCTURAL. S VISUAL AND MECHANICAL I PERNIT RESIM TO FLOM IN.	FAILURE MODE-STRUCTURAL. LOT 32 PET SPECIMEN MAD WOLD IM POTTING AND IMPREGNATION OF COILS MAS UNMATISFACTORY DURIN 6 VISUAL AND MECHANICAL INSPECTION FOLLOWING SECTIONING, PARA. 4.13. THIS WAS CAUSED BY NO PERFORATION IN BOBSIN 10 PERMIT RESIM TO FLOW IN.	POTTING AND IMPREGNATION AND CARE WAS CARE	TON OF COILS	HAS S	HATISFACTORY DITION IN BOBBIN	ž e
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					PASE DOSE	****

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DIPPICULTIER REVIEW-AUTOPILOT BYSTEM-AIRBORNE

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VEHICLE BITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO	POLYESTER HAT &	TER OCCO NO 7349	NSTAND 4.7 POUN HSTAND 4.7 POUN AEF. CTCTH NO.		FORMATION ITEM	088C3ME-CECO	D BY VISUAL INS ING MAMPACTURE ING MANFACTURE POLTESTER MAT	0580RME-0EC0 7097	INSPECTION, PA	UL. 2) VENCOR 15 CTH NO. 551-4-0	PASE 0099
E 01F OTH	€	0 168	18 TO 411	4.14, THES MAS	ENT AS 1N		OW IN DUR		413 KA	BUCCESSE.	
11.	60/C PRACTICE AND	5/05	INSCRT REMENT REMENT LESS ST	PARA.	114010	3/03	A TO THE A	3/05 1	TE DUM	FRMI TES	
VEHIC		.3031	AEQUI AEQUI	850304 N TEST, THE CAS	8	\$3030	INCOMP T RESI	6 5050	COMPLE	1CH HA C 7 OR 12	
DIF DATA BOURCE PART NUMBER	O BE PERFORATED PER	UTP-PET 87-04178-1	D POTTING CRACKED. INSERTS INSTEAD OF	UTP-GUAL/PPT Z7-04164-1 INTERNAL CONTRUCTION IE NOT CENTERED IN	ULD YENDOR WAS YOT!	UTP-GUAL/PPT ET-04180-3	EST SPECIMENS MASS IN BOBBIN TO PERIAL MASSELLA TO PERIAL MASSELLA THE WITH GO/C PRACT THE NO. 551-4-008.	UTF-QUAL/PPT 27-04179-5	IT SPECIPENS MAS IN	TER GO/C BOBBINS WHILE THE CHIEN SPACE PA	maja filomografia de propiosione de propiosione de la compansión de la compansión de la compansión de la compa
TEST/REPORT HUMBER FAILED COMPOMENT MANE	CORRECTIVE ACTION MAR 1) BOBBINS TO BE PERFORATED PER IN INTERMINDING INSULATION, REF. CTCTH NO. 881-4-DID.	R7C4408 TRAXSFORMER	FAILURE WORSSTRICTURAL, LOT 32 PET SPECIMEN FAILED INSERT—STREWGIN-PIST, PARA-ATTE-INSERT'S BECAN TO TURN AT 4.1 P CARD INCHES AND INSERT B BECAN TO TURN AT 3.5 POUND INCHES AND POTTING CRACKED. REQUIREMENT IS TO WITHSTAND 4.7 POUN D INCHES OF TORGUE. THIS WAS CAUSED BY TYPE OF INSERTS USED. CORRECTIVE ACTION-WENDOR CORRECTIVE ACTION WAS TO USE BRAYS INSERTS INSTEAD OF STAIMLESS STEEL TYPE. REF. CTCTH NO. 531-4-009.	UTGPILOT-SAUMRE-A/B FR 69C 4063.1 UTP-QUAL/PPT 650506 60/C YES APPLIED CG-PON CHILURE WODE-OUT OF TOLERANCE, DURING INSPECTION OF INTERNAL CONTRUCTION TEST, PARA. 4.14, TND TEST SPECIMEN B ENHISTED DISCREPANCES IN THE WE AND ORDER NOT CENTERED IN THE CASINGS. THIS WAS CAUSED BY POOR FABRICATION TECHNIQUE DURING NAMIFACTURE.	CORRECTIVE ACTION-THIS MAS CONSIDERED A VERY MINOR PROBLEM AND VENDOR WAS NOTIFIED OF INCIDENT AS INFORMATION ITEM ATHEN THAM REALEST FOR CORRECTIVE ACTION. REF. CICTH NO. 351-4-006.	69C-4061.1 Transforedr	THE POTTING IMPREGNATION OF THREE TEST SPECIMENS WAS INCOMPLETE AS INDICATED BY VISUAL INSTANCE AND ACCOUNTS WAS CAUSED BY LACK OF PERFORATIONS IN BOBBIN TO PERMIT RESIN TO FLOW IN DURING MANUFACTURE. TO 1) PERFORATE BOBBINS IN ACCORDANCE WITH GO/C PRACTICE, 2) MAT SUBSTITUTE POLYENTER MAT MHEN SPACE FACTOR PERMITS, REF-CTCTH NO. 551-4-008.	69C-4062.1 Transpormer	THE POTITING IMPRESENTION OF TWO TEST SPECIMENS WAS INCOMPLETE DURING VISUAL INSPECTION, PA BOSSINS NOT PERFOCATED TO PERMIT IMPREGNATION.	CORNICTIVE ACTION-YENDOR TO (1) BOBBINS WILL BE PERFORATED PER 60/C BOBBINS WHICH HAVE BEEN SUCCESSFUL, E) YENCOR IL USE POLYESTER MAT AS INTERHINDING INSULATION REPLACING MYLAR (MHEN SPACE FACTOR PERHITS), REF. CTCTH MO. 531-4-0 it.	AND AND THE PROPERTY OF THE PR
STRICK SUR-STRICK	CORRECTIVE ACTION-VENDOR	UTOFILOT-SQUAPE-A/B	PATLURE MODE-STRICTURAL, GAO INCHES AND INSERT B B D INCHES OF TORBUE, THIS N CORECTIVE ACTION-WENDOR \$31-4-005.	UTGPILOT-SAUARE-A/B PR 69C 4063.1 CHOKE-TRANSFORM FAILURE HODE-OUT OF TOLERANCE, DURING VI B ENHIBITED DISCREPANCIES IN THAT THE WE FABRICATION TECHNIQUE DURING MANUFACTURE.	CORRECTIVE ACTION-THIS MARATHER THAN REQUEST FOR CO	UTGTTLUT-SQUARE-A/B	FAILURE MODE-STRUCTURAL. PECTION. PARA. 4.16. THIS. CORRECTIVE ACTION-WENDOR FOR MYLAR INTERLATER TAPE	UTOFILOT-SQUARE-A/B	FAILURE MODE-STRUCTURAL. RA. 4. THIS MAS CAUSED BY	CONVECTIVE ACTION-VENDOR LLL USE POLYESTER MAT AS 1 17.	reasonement and descriptions of the contract o

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	BITE PRI VENDOR PART NO	0980RM:-0£C0 7887	TIME MTERIAL	VENT USE OF OUTCOME TOTAL NO. 535-4	YES OSBORNE-OECO	SPECTIVENS PAILED AT VALUES FROM 3.5 TO 4.0 TYPE OF INSERTS USED, AND POOR POTTING RESIN AND AND AND AND MOTHER RESIN AND AND AND AND AND AND AND AND AND AN	OSBORNE 7997 1 SHOMED VARIOU R HORIML SIZE.	BE USED IN HOUTURE HOLSTURE	TES OSBORNE NO 10316	TEST SPECIMENS POOR POTTING
Ţ	1 N	ë g	. 0. 8 . 0. 8		7. O	ACE SERTS	3 3 3 3		20	3 8
		3/99	od Siere	SPECS TO	50 / C	SED, AND TO REP. MATED IN CROCKER IN	EST SPECI	TUN BHALLI USED ON 1	3/9 3	A. 4.11. ION. CAM E 80-80.
CANE	VENICLE DATE DIF	#80303	4.17, AT VA	D ANNOLAN NI VISE CECO GC CENOUS BEFC	820303	OF INSERTS L	65041E 37, 3 OF 6 T 0 APPROXIMAT	THAT MAGNES	#3040E	OH TEST, PAR AFTER IMMERS I D BHOULD B
PILOT SYSTEM-AIRS	DIF DATA SOURCE PART NUMBER	UTP-BUAL/PPT E7-04179-5	ENGTH TEST, PARA. E TYPE OF INSERT	G DEEPER KNURL AN TE INSERTS, (3) RE H OF RESIN 18 HOM	UTP-QUAL/PFT E7-04180-3	S CAUSED BY TYPE OF CAUSED BY TYPE OF CAUSED BY TYPE OF CAUSE AND OF CAUSENT US PEC TO PREVENT US TO NO.331-4-003.	UTP-GUAL/PPT E7-D4179-5 URE RESISTANCE TE ASE OF THE PINS TO B PINS AND THE B	IL 1965 DIRECTING	UTP-GUAL/PPT 27-04183-1	FOLLOWING IMMERSIC UNMOTICED UNTIL / COMBISTANCY, SHORE
DISTICULTES BEYIEN-AUTOFILOT SYSTEM-AIRSCHAE	TESTARFORT NUMBER FAILED CONFORENT MANE	4sc1042.1 Transferer	FAILURE MODE-BTRUCTURAL, 4 TEST SPECIMENS FAILED INSERT STRENGTH TEST, FARA, 4.17, AT VALUES OF E.O. TO 4.0 INCH-PON MOS HHERE 4.7 INCH-POLMOS IS REGUIRED, THIS MAS CAUSED BY THE TYPE OF IMSERT USED AND POSSIBLE POOR POTTING MATERIAL.	CORRECTIVE ACTION-VENOOR TO (1) UFE SAME BRASS INSERT HAVING DEFFER KHURL AND ANNILAR HIM- THAT WOLL HAS USED SSFULLY. (2) SUGHIT A PROCESS SAFE, FOR THE CLEANING OF ABOVE INSERTS, (3) REVISE OECO AC SPECS TO PREVENT USE TDATED MATERIAL, (4) REVISE OECO MILING SAFERS TO INSURE BATCH OF RESIN 18 HONDERNOUS BEFORE USE. REF-CTCTH NOODA.	69C4561.1 Transforedr	FAILURE MODE-STRUCTURAL-DURING PARA, 4.19 INCAT BIRENGIH TEBT, 4 TEBT SPECTHENS FAILED AT VALUES FROM POTTING RESIN WEN POLKOS MECRE REQUIRED TORGIE 18 4.7 INCH POLKOS. THIS MAS CAUSED BY TYPE OF INSERTS USED, AND POOR POTTING RESIN CORRECTIVE ACTION-VEDICAT TO 12 USE BRANS INSERTS THAT HAVE DEEPER KMARL AND ANNULAR RIMG TO REPLACE STAIMLESS STEEL INSERT, R3 SUBHIT CLEANING SPEC. AND HANDLING THERE AFTER SPEC TO PREVENT USE OF CONTAMINATED INSERTS, 33 REVISE 66 SPECS, TO PREVENT USE OF OUT OF DATE POSTING RESINS, 43 REVISE POTTING SPEC TO INSURE THOROUGH MIXING OF BATCH OF R ESINS BY COMPANENTS TO INSURE HONOGENOUS RESIN MIXES. REF-CTCH NO.351-4-005.	UTGPILOT-SQUARE-A/B 09-4062 TRANSFORMER E7-04179-5 ZAILURE MODE-STRUCTURAL, DURING PARA, 4.14, FOLLOWING MOISTURE RESISTANCE TEST, 3 OF 8 TEST SPECIMENS SHOWED VARIOUS BACKELS OF THE PINS TO APPROXIMATELY HALF THEIR MORNAL SIZE.	CORRECTIVE ACTION-AN AND MAS SENT TO THE TEST LAS ON EL APRIL, 1965 DIRECTING THAT MAGNESIUM SHALL HOT BE USED IN MO ISTARE MESISTAMCE TESTS. THE TEST LAS STATED THAT ANGOIZED ALUMINUM FIXTURES WILL NOW BE USED ON ALL FUTURE MOISTURE PESISTAMCE TESTS. REF. L'TCIH NO. 251-4-603.	FRESCADEL . 1 Transformer	FAILINE HODE-STRUCTURAL, DURING VISUAL INSPECTION PORTION, FOLLOWING INMERSION TEST, PARA, 4,11, TWO YEST SPECINENS Neke cracked and believed cracked due to thermal shock, but unhoticed until after immersion. Caused by Poor Potting Resim, resim read 65-70 shore D harmess and was of cheerey consistancy, shore D should be sd-bo.
	BTETET BLE - BTETET	AUTOFILOT-BRIMRE-A/B	FAILURE MORE-STRUCTURAL. MOS HHERE A.T INCH-POLNES.	CORRECTIVE ACTION-VEHOOR SSFULLY, (R) SUBMIT A PROC TDATED MATERIAL, (A) REVIS -004.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-STRUCTURAL-D WCH POUNDS MERE REQUIRED CORRECTIVE ACTION-VENIOR INSERT, E) SUBHIT CLEANIN SPECS, TO PREVENT USE OF ESINS BY COMPONENTS TO INS	AUTOFILOT-SQUARE-A/B Zalume MODE-STRUCTURAL, S DEGRES OF PIN EPOSION.	CORRECTIVE ACTION-AN AVOISTANCE TESTS. Y	AUTOFILOT-BAUARE-A/B	FAILURE MODE-BTRUCTURAL, Mere Cracked and Believed Resim, resim read 65-70 m

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-	SITE PRI VENDOR NAME	USE OF OUT DATERAN PPT. REF.	APPLIED COMPONENTS	THO TEST SPECIFIES WERE CRAC I WENT LIMMOTICED UNTIL AFTER AND WAS OF CHEESEY CONSISTAN CAL TO SMEWENT USE OF DUTDATE	L RERUM PPT	YES OSBORNE NO 10318	EN HAD CRA EN WAS OF CH USE OF OUTD	YES CSBORNE NO. 10318 SPECIMENS HAD D HANNESS AND W	USE OF OUTD	OSBORNE 10321	THENS HAD SE
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		SE AND	9	AND	Q	5/03	RED HAR RED HAR EN TO P TEST RE	760 TWO T	2	3/99	TWO TES
3. €	VEHICLE DATE DIF	0 40/C DEST	6 50402	CA TEST BUT CA TEST BUT CO HARRESS	COM EXPENS	650330	MARA. 4.10. D 89-TO 840 O 60/C DESI ES AND PFT	630330 T PARA, 4.6	O 60/C DESI	630330	ARA. 4.11.
PILOT SYSTEM-AIRB	DIF DATA SOURCE PART MUNDER	NS SATISFACTORY T TED SAMPLES AT ME	UTP-QUAL/197	N POLLOWING INMER URING THERMAL SHORE I READ 63-70 SHORE	BURNIT BANNER AT	UTP-QUAL/PPT 27-04161-1	RESIN, RESIN REA RESIN, RESIN REA RES SATISFACTORY T ED NEW TEST SAMPL	UTP-BUAL/PPT 650330 GD/C YES OSBORNE 27-04162-1 NO. 10318 THERMAL SHOCK TEST PARA, 4.8, TWO TEST SPECINENS HAD CRA	AS SATISFACTORY T	UTP-QUAL/PPT E7-04160-1	THERMAL SHOCK. P
DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER FAILED COMPONENT NAME	ACTION-VENDOR SUBMITTED CORRECTIVE ACTION THAT WAS SATISFACTORY TO GD/C DESIGN TO PAEVENT USE OF OUT DA. OR HISUSE OF INDATE MATERIAL. VENDOR THEN SUBMITTED SAMPLES AT HIS OWN EXPENSE AND GD/C RERAM PPT. REF. 11-4-DOE.	FRESCAUGE.1 Transformer	FAILURE MODE-BYRUCTURAL, DURING PARA 4.12, VISUAL INSPECTION FOLLOWING INMERSION TRST, TWO TEST SPECIMENS MERE CRACKED ON SUFFACE OF BODY, IT IS SUSPECTED THAT THIS OCCURRED DURING THENKE, SHOCK TEST BUT MENT UNMOTICED UNTIL AFTER INMERSION TEST, THIS MAS CAUSED BY POOR POTTING RESIN, RESIN READ 65-70 SHORE D HARMERS AND WAS OF CHESEY CONSISTANCY, SHORE D SHOWED BE 80-90.	CORECTIVE ACTION-VENDOR SUBMITTED CORRECTIVE ACTION THAT SAME SATISFACTION TO WALL DESIGN TO FACTOR OF METERIAL OF MISUSE OF INDATE MATERIAL, WEIGOR MILL THEN RESURNIT SAMPLES AT OWN EXPENSE AND SO/C WILL RERUN PPT. R. UF. CTCTM NO. 551-4-001.	FRESCAUGE.1 Transforner	FAILURE MODE-STRUCTURAL. OURING VISUAL INSPECTION FOLLOWING THERMAL SHOCK, PARA. 4.10, THE TEST SPECTHEN HAD CRACKE DON THE DODY OF THE TRANSFORMERS AND WAS CAUSED BY MOTING RESIN, RESIN READ 83-TO SHORED HARNESS AND WAS OF CHEES EY CONSISTANCY. SHORE D SHOULD BE 80-80. EY CONSISTANCY. SHORE D SHOULD BE 80-80. CORRECTIVE ACTION-VENDOR SUBHITTED CORRECTIVE ACTION THAT WAS SATISFACTORY TO GD/C DESIGN TO PREVENT USE OF OUTDATE D MATERIAL OR HISUSE OF INDATE MATERIAL. YENDOR THEN BUBHITTED NEW TEST SAMPLES AND PPT TEST REPEATED. REF. 558-5-03.	FRESCADES.1 TRAMSFORMER OURTHG VISUAL INSPECTION FOLLOWING	CHEESEY CONSISTANCY. SHORE D SHOULD BE 80-90. CORRECTIVE ACTION-VENDOR SUBHITTED CORRECTIVE ACTION THAT MAS SATISFACTORY TO 6D/C DESIGN TO PREVENT USE OF OUTDATE IN ATERIAL OF HISUSE OF INDATE MATERIAL OF HISUSE OF INDATE MATERIAL AND ALSO RESUBHITTED SANFLES AT OMN EXPENSE FOR RENUM OF PPT 7EST. KEF. CTCT 100. 558-5-020.	PRSCC4087.1 CHOKE/TRANSFORMEN TYPE	FAILURE MODE-ATRUCTURAL, DUMING VISUAL INSPECTION FOLLONING THERMAL SMOCK. PARA, 4.11, TWO TEST SPECIMENS MAD SEVER AL CRACKS ON THE BODY OF EACH TRAIISFORMER. THIS IMB CAUSED BY CHIRSION OF GLAUS TAPE REINFORCEMENT DURING CONSTRUCTI ON PMASE AT MEMDORS FACILITY.
15 JUN 1888	STSTEN BUS-STSTEN	CORRECTIVE ACTION-VENDOR ED MATERIAL OR HISUAL OF CTCTM NO. 351-4-002.	AUTOFILOT-BAUARE-A/B	FAILURE HODE-STRUCTURAL, DU KED ON SUBFACE OF BGDY, 17 1 IMMERSION TEST, THIS MAS CAU CY, SHOKE D SHOALD BE 80-90.	CORRECTIVE ACTION-VENDOR D MATERIAL ON MIBUSE OF 11 EF. CTCTH NO. 551-4-001.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-STRUCTURAL, DURING VISUAL DON THE BODY OF THE TRANSFORMER, THIS ME CONSISTANCY, SHORE D SHOULD BE 80-90, CORRECTIVE ACTION-VEMDOR SUBHITTED CORRECTIVE ACTION-VEMDOR SUBHITTED CORRESPONDED INDATE MATERIAL, 9.	AUTOPILOT-BAUARE-A/B	CAS CHITTE BOAT OF THE TA OF CHEESEY CONSISTANCY. S CORRECTIVE ACTION-VENDOR D MATERIAL OF HEUSE OF T H NO. 558-5-020.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-STRUCTURAL, DUM AL CRACKS ON THE SODY OF EACH ON PMASE AT VENDORS FACILITY.

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20 2 200 200	DIFFICIATION REVIEW-AUTOPILOT STRIEM-AIRBOTHE	PILOT BYSTEM-AIRBOY	*	
8.45.7E.A	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENCOR PART NO	9
CORRECTIVE ACTION-VENDOR A33 14PE PEINFORCEMENT, VE CTH MO, \$38-5-02E.	CORRECTIVE ACTION-VENDOR WAS NOTIFIED THROUGH GO/C PURCHASING THAT THEY HAD TO TAKE STEPS TO PREVENT OHISSION OF GL ASS TAPE PEINFORCEMENT, VENDOR RESUBHITTED NEW PPT APECIMENS AND NEW PPT TO BE RERUM. THIS NAS ACCOMPLISHED, REF. CT CTH NO. 838-5-022.	NG THAT THEY HAD TO AND NEW PPT TO BE	. TAKE BTEPB TO PREVENT ONISSION C REAUN. THIS MAS ACCOMPLISHED. RE	3 5
	FRESCADAR.1 CHOKE-TRANSFORMER TYPE 21-04160-1 NO 21-04160-	E7-04160-1	830330 60/C YES 60/C NO PARA, 4.31, THREE SPECIMENS NAD	ORA CRA
FAILURE MODE-STRUCTURAL. CKS ON TRANSFORMER BODY: 1 CORRECTIVE ACTION-5D/C TO AND A MEW PPT WAS TO SE R	FAILURE MODE-STRUCTURAL, DURING VISUAL INSTILLION FULLUIM FRENCE MODE. CRA ON TRANSFCREEK BODY. THIS WAS CAUSED BY ONISSION OF SLASS TAPE REINFORCERENT. CORRECTIVE ACTION-5D/C TOOK STEFS TO PREVENT ONISSION OF SLASS TAPE REINFORCERENT AND A NEW PRT WAS TO GE RERUN; WHICH WAS ACCOMPLIBHED, REF. CTCT" TO, 538-3-021.	ASS TAPE RETAFORCEM	ABS TAPE REINFONCEMENT. GOVC RESUBMITTED HEW PPT SAMPLES	7. E.S.
AUTOFILOT-SEUARE-A/B	FRS9CADS8-1 YRANSFORMER	UTP-QUAL/PPT 27-04159-1	450330 60/C YES 090GRNE NO OECOLOSEO	
FAILURE MODE-STRUCTURAL, DURING VICUA FICANT CRACKS ON PRIMARY AND SECONDARY T DURING CONSTRUCTION PHARE BY VENDOR.	FAILUNE MODE-STRUCTURAL, DURING VICUM, INSPECTION FOLLOWING THERMAL SHOCK TEST, PARA, 4,12, SIX SPECINENS HAD SIGNI Figant cracks on primay and secondary sides of transformers. This was caused by chibsion of glass tape reinforcemen I during construction phase by vendor.	THERMAL SHOCK TEST	, PARA, 4.12, SIN SPECINENS HAD SIGNITY CHIDSION OF GLASS TAPE REINFORCENEN	39
CORRECTIVE ACTION-VENDOR LASS TAPE REINFORCEMENT. N TCTH NO. 358-5-018.	CORECTIVE ACTION-VENDOR WAS NOTIFIED THROUGH GO/C PURCHASING, THAT THEY HAD TO TAKE STEPS TO PREVENT OHISSION OF LASS TAPE RELIMPORCEMENT. VENDOR TO RESUBNIT MEM PPT SPECIMENS AND NEW PPT TO BE RERUN. THIS WAS ACCOMPLISHED. REF. TOTH NO. 558-5-018.	NG, THAT THEY HAD T A AND NEW PPT TO BE	PURCHASING, THAT THEY HAD TO TAKE STEPS TO PREVENT OHISSION OF SPECINEHS AND NEW PPT TO BE RERIN. THIS NAS ACCOMPLISHED. REF.	5 U
AUTOFILOT-SQUARE-A/S	FROSCADAS.1 Transformer	UTP-GUAL/PPT #7-04158-1	8503£9 60/C YES 60/C	1
FAILURE MODE-OUT OF TOLEN THE LAPUT FINS. RESISTANCE CITHER TEST EQUIPMENT, CR	FAILURE MODE-OUT OF TOLERANCE, DURING LIFE TEST, PARA, 4.7, TEST SPECIMEN WAS SEVERELY BURNED ON BOTTOM AND ARCHAD THE INPUT PINS. RESISTANCES OF THE WINDINGS MERE VERY LOW AND OUT OF TOLERANCE, CAUSE WAS NOT ACTUALLY DEFEMINED TO ELIMER TEST EQUIPMENT, OR TEST PERSONNEL ERROR, OR BE ASCRIBED CONCLUSIVELY TO ANY DEFECT IN TRANSFORMER.	TEST SPECTHEN MAS D COT OF TOLERANCE. BED CONCLUSTWELY TO	DURING LIFE TEST, PARA, 4.7, TEST SPECIMEN MAS SEVERELY BURNED ON BOTTOM AND ARNUMD FINE WINDINGS MEE VERY LOW AND CUT OF TOLERANCE, CAUSE MAS NOT ACTUALLY DETERMINED THENSONMEL ERROR, OR BE ASCRIBED CONCLUSIVELY TO ANY DEFECT IN TRANSFORMER.	9 ⁰
CORRECTIVE ACTION-RERUN C AND OUTPUT VOLTAGES AND C	CORRECTIVE ACTION-RERUM OF LIFE TEST WITH REPLACEMENT SPECIMEN INCLUDED MONITORING AND CONTINUOUSLY RECORDING INPUT AND OUTPUT VOLISEES AND CURRENTS AND SUBFACE TEMPERATURE OF THE SPECIMEN, REF. CTCTH NO. 358-5-017.	MEN INCLUDED MONITO THE SPECIMEN, REF.	RING AND CONTINUOUSLY RECORDING : CTCTH NO. 558-5-017.	10.00
AUTOFILOT-SQUARE-A/B	PRESCADSO.S CHOKE-TRANSFORMER TYPE	2-00170-410 27-04166-1	\$5072E \$0.7C NO \$0.7C	
FAILURE MCDE-OUT OF TOLER APECINEM HAD INDUCTANCE YA IES. THIS MAS CAUSED ST CH GRAMCE.	FAILUME MODE-OUT OF TOLERANCE, DUMING INDUCTANCE MEASUMENENT OF ELECTRICAL CHARACTÉRIBTICS CHECKOUT TEST, ONE TEST APECINEM HAD INDUCTANCE VALUE OF 10.565 MHICH MAS DUT OF TOLERANCE ON THE LOW SIDE, REGUINED IS 10.4544-10-4654 HENRIES, THIS MAS CAUSED BY CHECKOUT EQUIPMENT USED IN MANUFACTURING PHASE OF TRANSFORMER; BEING IN ERROR AND OUT OF TOLERANCE.	IT OF ELECTRICAL CHA ERANCE ON THE LOW B RING PHASE OF TRANS	RACTERIBIICS CHECKOUT TEST, ONE ' IDE, REBUINED IS 10.4344-10.6658 FORHER, BEING IN ERROR AND OUT OF	: 2 d
	geographic Consequences of the strangers	the state of the s	PAGE 0108	0108

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DIFFICULTIES REVIEW-AUTOFILO; SYSTEM-AIRBORNE

SYSTEM SUG-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE FART NUMBER	VEHICLE SITE	PRI VENDOT NAME OTH VENDOR PART NO	
	ades a company de la compa		management of the state of the	Activities and Activi	***
CORRECTIVE ACTION-MANUFACED AND ALL OTHER TEST UNIT	CORRECTIVE ACTION-MANUFACTURING EQUIPMENT USED IN SETTING PROPER INDUCTANCE VALUES INTO COIL OF THAMSFORMER CORRECT ED AND ALL OTHER TEST UNITS RECHECKED, REF. CICTH NO. 858-8-016.	TOPER INDUCTANCE VAL	LUES 1NTO COIL OF	THAMSFORMEN CORRECT	
AUTOFILOT-SQUARE-A/B	69-4051 Transformer	UTP-QUAL/PPT E7-04140-3	650310 60/C	YES 600C NO 27-04180-3	1,921.03
FAILURE MODE-OUT OF TOLERANCE. DURING VIBUAL ANCES FOR DATA SHEET REFERENCE K WHICH 18 RE OTHER D.O45 INCHES. THIS WAS CAUSED BY A DEFE		INSPECTION, PARA, 4.1, TWO TEST SPECIMENS HAD DIMENSIONAL OUT OF TOLES RED TO BE 0.030 TO 0.040 INCHES, OME UNIT MEASURED 0.033 INCHES, THE STIVE TEFLON PLATE DURING MANUFACTURE.	PECIMENS HAD DIMEN CME UNIT MEASURED ME.	SIGNAL GUT OF TOLER 0.053 INCHES, THE	
CORRECTIVE ACTION-TEFLON 30-5-01E.	CORRECTIVE ACTION-TEFLON HOLD PLATES RESPONSIBLE FOR OUT OF TOLESANCE DINENSION MAVE DEEN REPLACED. REF. CICTH NO 4-3-01E.	TOLERANCE DINENSICE	1 HAVE DEEN REPLACI	TO. REF. CICTH NO 3	
AUTOFILOT-SQUARE-A/B	69-403E Transfoneer	UTP-QUAL/PPT E7-04179-5	450310 60/C	PES CO/C NO 27-041:9-5	110266
FAILURE MODE-OUT OF TO ER URING PARA: 4:1; VISUAL IN 0.040 INCHES: THIS WAS CA	F TO ERANCES, THREE TEST SPECIMENS HAD DIMENSIONAL OUT OF TOLERANCES FOR DATA SMEET REFERENCE & D. SMAL, INSPECTION, THE UNITS MEASURED D.D44, D.043, AND D.D42 INCHES, MHERE RESULKEMENT IS 0.030 TO UNS CAUSED BY A DEFECTIVE TEPLON PLATE, NOT GIVING THE SPECIFIED INSERT BUTTON.	HENSICHAL OUT OF TO 1 0.043; AND 0.042 OT GIVING THE SPECIE	ERANCES FOR DATA INCHES. MACHE REGULTED INSERT BUTTON	MEET REFERENCE & D IREMENT 18 0.030 TO	
CORRECTIVE ACTION-TEFLON	CORRECTIVE ACTION-TEFLON MOLD PLATES MANE BEEN REPLACED. REF. CTCTH NO. 558-5-011.	F. CTCTH NO. 558-5-6	311.		
AUTOFILOT-TRUARE-A/B	FRENCTO49.1 TRANSFORMER	UTP- GUAL/PPT E7-04163-1	\$50309 60+0	TES CO/C NO E7-04163-1	****
FAILURE MODE-OUT OF TOLER OR THREE TEST BPECIMENS FO 0.030 TO 0.040 INCHES IS R DURING CONSTRUCTION.	FAILURE MODE-OUT OF TOLERANCE, DURING VIBURL INSPECTION TEST, PARA, 4.1, DIMENSIONAL OUT OF TOLERANCES WERE MOTED POR THREE TEST SPECIMENS FOR DATA SHEET REFERENCE R. DIMENSIONS WHERE D.030, O.030, ANC 0.030 INCHES MERE RENUMBLE. O.030 TO O.040 INCHES IS RESURED. THIS MAS CAUSED BY A DEFECTIVE TEPLON MOLD PLATE TO GIVE SPECIFIED INSERT BUTTON DURING CONSTRUCTION.	T, PARA, 4.1, DIMEN N3 WHERE 0.030, 0.03 ETIVE TEPLOM MOLD PI	SIGHAL OUT OF TOLE!	RANCES WERE NOTED P ES WERE RENV. MAILE TED INSERT BUTTON	
CORFECTIVE ACTION-TEFLON MOLD PLATES RESPONSIBLE C COMPONENT LABORATORY, REF. CTCTN NO. 358-5-007.	ACTION-TEFLON MOLD PLATES RESPONSIBLE FOR OUT OF FOLERANCE DIMENSIONS HAVE BEEN REPLACED IN 607C HASMETI LABORATORY, KEF, CTCTH NO, 558-5-007.	FOLERANCE DIMENBION	45 HAVE BEEN REPLA	ED IN 60/C HAGNETI	
AUTOFILOT-BQUARE-A/B	FRSC-4054.1 Tansforen	UTP-QUAL/PPT &7-04183-1	\$50309 6D/C	TES OSBORNE-OECO NO 10316	
FAILURE MODE-OUT OF TO-ERANC OR TWO TEST SPECIMENS FOR DAT ON IS 0.030 TO 0.040 INCHES. ART USED DURING COMBTRUCTION.	PAILURE MORE-OUT OF TO-ERANCE, DURING VISUAL INSPECTION TEST, PARA, 4.1, DIMENSIONAL OUT OF TOLERANCES WERE NOTED FOR THE STATES OF THE THOUGH OF D.DAS AND D.DAS INCHES WERE NOTED MEN REGUINED DIMENSION IS D.DSD TO D.DAD INCHES, INCHES, THIS LAS GAUSED BY THE BUTTON AROUND THE INSERT BEING TOO LARGE DUE TO DEFECTIVE MOLD PART UMED DURING COMBINGING.	T, PARA. 4.1, DIMENI O.O48 AND O.O48 IN ROUND THE INSERT BE	HOWAL OUT OF TOLES HE WILL TOO LARGE BUK.	IANCES MERE NOTED P IN REGULATO DINENSI IO DEFECTIVE NOLD P	
		e de la composition della comp		PAGE 0103	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

VEHICLE BITE PRI VENDOR MME	AB MECESSARY THE RESPONSIBLE MO	09 60/C YES 60/C 692299	AD DIMENSIONAL OUT OF TOLLRANCES INCHES, M-ERE REQUIRED VALUE 18 61VE SPECIFIED INSERT BUTTON. VE BEEN REPLACED IN GD/C MACHETI	09 60/C YES 60/C 892300	SPECIMENS HAD DIMENSIONAL GUT O 1. AND D.D41 INCHES, WHERE REQUI	VE BEEN REPLACED IN 4D/C MACHETI	DB GD/C YES CABCHME (CECO ASSESS NO CECO 10318	SED BY THE BUTTON BURROWELING TH	AND AGREED TO CHECK AND CORRECT	09 60/C YES OCCO NO 7987	THERMAL SHOCK CYCLES, PARA-4-7-8
DIF DATA SOURCE PART NUMBER	CORRECTIVE ACTION-VENDOR LAS NOTIFIED OF PROSLEM AND HE AGREED TO CHECK AND CORRECT AS MECESSARY THE RESPONSIBLE MO D PARTS. REF. CTCTM NO.338-3-D03.	UTP-QUAL/PPT 650309 E7-04161-1	FAILURE MODE-OUT OF TOLERANCE, VISUAL INSPECTION, PARA, 4.1, THREE TEST SPECIMENS HAD DIMENSIONAL OUT OF TOLERANCES FOR DATA SHEET REFERENCE M. ALL READINGS NERE FIGH, THAT IS 0.048, G.030, AND 0.031 INCHES, WHERE REQUIRED VALUE IS BETWEEN 0.030 AND 0.040 INCHES, THIS WAS CAUSED BY A DEFECTIVE TEFLON MOLD PLATE TO 61VE SPECIFIED INSERT BUTTON. CONSIDER FOR CAUSED BY A DEFECTIVE DIMENSIONS HAVE SEEN REPLACED IN GD/C MACHETI	UTF-QUAL/PPT 630306	FAILURE MODE-OUT OF TOLERANCE, DURING VISUAL INSPECTION TEST, PLAN, 4.1, THREE TEST SPECIMENS HAD DIMENSIONAL OUT OF TOLERANCES FOR DATA SHEET REFRANCER, THAY IS ALL MEADINGS WERE HIGH: 0.042, 0.051, AND 0.041 INCHES, MHERE REGUINERD VALUE IS BETWEEN 0.030 AND 0.043 INCHES, THIS MAS CAUSED BY A DEFECTIVE TETLON MCLD PLATE TO GIVE SPECIFIED INSERT BOTTON, DURING CONSTRUCTION,	CURRECTIVE ACTION-TEFLON MOLD PLATES RESPONSIBLE FOR OUT OF TOLERANCE DINENSIONS HAVE BEEN REPLACED IN 40/C MACHETI COMPONENT LABORATORY, REF. 558-5-014.	UTP-QUAL/PPT 650309 E7-04161-1	OLERANCI, VIBUAL INSPECTION 1 PARA, 4.1, ALL BIX TEBT BPECIMENS HAD DIMENSIONAL CUT OF TOLERAN TRENCE M. ALL MERE MIGHER THAN MART MAR REGUIRED. THIS MAR CAUSED BY THE BUTTON BURROUNDING TH 16E.	S LAS CONSIDERED A MINOR GISCREPANCY. THE YENDOR WAS CONTACTED AND AGREED TO CHECK AND CORRECT ONSIDEE HOLD PARTS, REP. CICTH NO. 558-5-004.	UTP-PET 630309 RT-04179-5	FAILURE MODE-STRUCTURAL, LOT I TEST SPECINGM MAD A CRACK IN THE POTTING AFTE. FIVE THERMAL SMOCK CYCLES, PARA-4-7-8 1. During pet izsting. The cause could not be determined.
TEST ACTORT NUMBER	4- WENCOR LAS HOTTFIED OF PROBLEM	FRESCADAT. 1 TRANSFORMER	OF TOLERANCE, VISUAL INSPECTION, CFERENCE M. ALL READINGS NEWE FILL O 0.040 INCHES, THIS MAS CAUSED I	C CONCOMENT LABORATORY. REF. CTCTH NO. 558-5-013. UTGHILOT-SELARE-A/B FR69C4546.	OF TOLERANCE, DURING VISUAL INSI DATA SHEET REFERENCE R. THAT IE I TEM D.030 AND D.043 INCHES. THIS CONSTRUCTION.	N-TEFLON HOLD PLATES RESPONSIBLE ATORY, REF. 358-3-018.	FRSSCADSS-1 TRANSFORMER	OF TOLERANCE. VIBUAL INSPECTION T REFIRENCE M. ALL MERE HIGHER TO 2 LARGE.	4-THIS WAS CONSIDERED A MINOR DIS RESPONSIBLE MOLD PARTS, REF. CTG	6 665-1240 TRANSTOCHER	ACTURAL. LOT 1 TEST SPECIMEN HAD A CRACK STIME, THE CAUSE COULD NOT SE DETERNINED.
SYSTER SUG-SYSTEM	CORRECTIVE ACTION-VENDOR MAS NOTI	AUTOFILOT-BOURE-A/B	FAILURE MODE-OUT OF FOR DATA SHEET REFE BETWEEN 0.030 AND 0	C COMPONENT LABORATION OF THE PROPERTY OF THE	FAILURE MODE-OUT OF TOLERANCE, F TOLERANCE OF TOLERANCE OF DATA SHEET REF RED VALUE IS BETWEEN 0.030 AND RT BOTTOM, DURING CONSTRUCTION.	CURRECTIVE ACTION-TE	A MILOT-BRUANE-A/B	FAILURE HODE-OUT OF TOLERANCE. CES FOR DATA SHEET REFERENCE M. E INSERT BEING TOO LARGE.	CAMECTIVE ACTION-THE	AUTOFILOT-SQUARE-A/B	FAILURE MODE-BYRUCTUR .1. DURING PET 1257180

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PRI FENDOR NAME OTH VENDOR PART NO	WAS ACCEPTED. REF. CTCTH NO.	YES 60/C NO	OUT OF TOLERANCE,	YE\$ 60/C	NO BITED DIMENSIONAL IED INSERT BUTTON	. REF. CICTH NO.	YES 60/C	SEVEN TEST SPECIMENS HAD DIMENSIONAL OUT OF THES 18 REQUIRED.	YES CAL. MAG. CORP.	GCT96 AND A MILKY WHITE FILM COA DURING MANUFACTURE OF PET	AND TO TIGHTEN QUALITYING MATERIAL PER 810 858-5-002.
\$17E TIME DIF	MAS ACCEPTED) V	MENSIONAL O REQUIRED.	¥ 3/03	CINENS EXHIB	EEN REPLACED) S	CIMENS HAD D. D. REPLACED. R	x 5/05	ED AND A MIL	HE HOLD AND S OF POTTING CTH NO. 558-
ICE VEHICLE	189ED. LOT 1	00000	SPECIMEN HAD DIMENSIONAL 1 .03 INCHES IS REQUIRED.	650308	OUR TEST SPE N.D. PLATE TO	NSION HAVE B	650308	VEN TEST SPE IS 18 REQUIRE IS HAVE BEEN	641127	SPECIMEN WAS CRACKED CENTERED IN THE MOLD	RANSFORMERS IN THE WOLD INTINUM FIFTY MILS OF PO-CENTERED. REF-CICTH NO.
DIF DATA SOURCE PART NUMBER	WERE TESTED AND PASSED, LOT 1	UTP-QUAL/PPT 27-04159-1	RA. 4.1, OME SP PLUS .03 MINUS .	UTP-QUAL/PPT	E'-U4124-1 31, PARA, 4.1, F SCTIVE TEFLON HO	TOLERANCE DIME	UTP-QUAL/PPT 27-04160-1	HERE D.23 INCHE	UTP-PET 27-04185-1	THE TEST SPECIFYOT BEING CENTER	TONING OF TRANSTEQUIRES A MINID
TEST/REPORT NUMBER FAILED COMPONENT NAME	ADDITIONAL SPECIMENS FRC: LOT 1 MES	Freeced45.1 Transformer	FAILURE MODE-OUT OF TOLERANCE, DURING VISUAL INSPECTION, PARA, 4.1, ONE SPECIMEN HAD DIMENSIONAL OUT OF TOLEAANCE, ON DATA SMEET REFERENCE A, THAT IS 1.05 INCHES OB MINUS .03 INCHES IS REQUIRED.	F. CTCTH NO. 558-5-009.	FAILURE MODE-OUT OF TOLERANCE, DURING VISUAL INSPECTION TEST, PARA, 4.1, FOUR TEST SPECIMENS EXHIBITED DIMENSIONAL OUT OF TOLERANCE CONDITIONS FOR DATA SMEET REFERENCE K. DEFECTIVE TEFLOM MOLD PLATE TO GIVE SMECIFIED INSERT BUTTON IS RESPONSIBLE FOR DIMENSIONAL DISCREPANCIES.	MOLD PLATES RESPONSIBLE FOR OUT OF TOLERANCE DINENSION HAVE BEEN REPLACED. REF. CICTH HO.	Fr69Cad46.1 Transformer	RANCE. DURING VISUAL INSPECTION, PARA. 4.1, ALL SEVEN TEST SPECINENS HAD DIMENSIONAL OUT REFERENCE L, THAT IS 0.30 INCHES WHERE 0.25 INCHES IS REQUIRED. HOLD PLATES RESPONSIBLE FOR BUTTON DIMENSION ERRORS HAVE BEEN REPLACED. REF. CTCTH MO.	Z7-3978 TRANSFORMER	GCTSG DURING INNERSION TEST, PARA. 4.8, THE TEST SPECINEN WAS CRACKED AND A MILKY WHITE FILM CO. HIS MAS CAUSED BY THE TRANSFORMER NOT BEING CENTERED IN THE MOLD DURING MANUFACTURE OF PET	COMRECTIVE ACTION-CARR S663 SENT TO VENDOR TO IMPROVE POSITIONING OF TRANSFORMERS IN THE MOLD AND TO TIGHTEN GUALIT COMTROL TO IMSURE THAT THIS IS ACCOMPLISHED. SD/C DESIGN REQUIRES A MINIMUM PIFTY MILS OF POTTING MATERIAL PER SIGN. VISUAL EXAMINATION SHOWS THE CORE IMPRESSION WHEN THE UNITS ARE NOT CENTERED. REF-CTCTH NO. 558-5-002.
N31EW BUR-SYSTEM	CORRECTIVE ACTION-THREE . 556-5-003.	AUTOFILOT-BRURE-A/B	FOR DATA SHEET RETERENCE /	CONSIDERED VERT MINOR. REF. CICTH NO. 558-5-009. AUTOFILOT-SQUARE-A/B FR69C4044.1	FAILURE MODE-OUT OF TOLERANCE, DURING VISUAL OUT OF TOLERANCE CONDITIONS FOR DATA SHEET RE IS RESPONSIBLE FOR DIMENSIONAL DISCREPANCIES.	CORRECTIVE ACTION-TEFLON 558-5-010.	AUTOPILOT-SAURE-A/B	FAILURE MODE-OUT OF TOLERANCE, DURING TOLERANCE LA TOLERANCE FOR DATA SHEET REFERENCE LA CORRECTIVE ACTION-TEFLON MOLD PLATES R	AUTOPILOT-SQUARE-A/B	FAILURE MODE-BTRUCTURAL. TED THE ENTINE SURFACE. T LOT 14.	CORRECTIVE ACTION-CARR 5683 5EP Y CONTROL TO INSURE THAT THIS IS E. VISUAL EXAMINATION SHOWS THE

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	DIFFICULTIES REVIEW-AUTOFILCT SYSTEM-AIRBORME	OFILCT SYSTEM-AIRBOR	¥			A COLUMN TO THE PROPERTY OF TH	r	
\$ 在101.41.45 在101.41.41.45	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	317E 71ME 01F	2 5 5	PRI VENDOR MANE OTH VENDOR PART NO		
 AUTOFILOT-BAUMRE-A/B	RT-3005 TRANSFORMER	UTP-PET R7-04171-3	#1117 #	50 / C	20	YES CAL. MAG. CORP.	0	_
FAILURE MODE-ATRUCTURAL BT PARA, 4.7, CRACKB APP CTURE,	FAILUME MODE-ATRUCTURAL, DURIMS PET LOT 18 YEAT, SPECIMEN HAD BEVERAL CRACKS ON OME SIDE FOLLOWING THERMAL SHOCK TE It para, 4.7, cracks appeared along core, cracks mere caused by transformer hot being centered in mold during mamufa tume.	HAD BEYERAL CRACKS OF STRANSFORMER HOS	NO ONE SIDE	FOLLOWIN	7 g	ESPAL SHOCK TE DURING MANUFA		
COPRECTIVE ACTION-DESIGN SROUP AND BUALITY AS SENT TO VENCON TO IMPROVE POSITIONING OF TRIES IS ACCOMPLISHED. REF. CTCTN NO. 558-5-001.	CORECTIVE ACTION-DESIGN GROUP AND BUALITY ASSURANCE INSPECTED ALL 104 UNITS. SO ACCEPTED AND 24 REJECTED. CARR 558 3 SENT TO VENOOR TO IMPROVE POSITIONING OF TRANSFORMERS IN THE HOLD AND TO TIGHTEN QUALITY CONTROL TO INSURE THAT TH IS IS ACCOMPLISHED. REF. CICTH NO. 558-5-001.	CTED ALL 104 UNITS. THE HOLD AND TO 1164	BO ACCEPTED ITEN QUALITY	CONTRO	10	CTED. CARR SEE INSURE THAT TH		
 AUTOFILOT-BOURE-A/B	27-3784 Transformer	UTP-PET E7-04176-1	641023	3/ 9	7£8 OECO NO 7338	7336	***	
FAILURE MODE-STRUCTURAL MCH POUMDS DURING THE IN	FAILUME HODE-STRUCTURAL, LOT 14 TEST SPECINEN HAD THD INSERTS PULL OUT AT BELOW THE REQUIRED TORGUE VALUE OF 14-5 KH POHEDS DURING THE INSERT STRENGTH TEST, PARA, 4-12. THIS WAS CAUSED BY FAULTY POTTING TECHNIQUES.	RTS PULL OUT AT BELCE WAS CAUSED BY FAUR	A THE REQUI	MED TONG		NLUE OF 14.5 I		
CORRECTIVE ACTION-CORPE R 054-E-4E7.	CORRECTIVE ACTION-CORPECTIVE ACTION REQUEST NO. 5654 MAS 8	5654 MAS SENT TO VENDOR TO INCREASE BC IN POTTING PROCESSES. REF.	MEASE OF D	MITTING .	Ď.	CESSES. REF. P		
AUTUFILOT-BAUARE-A/B	M. V-AB-04-4913F ACCELEROM TEN, COMECTOR	FAR 27-04099-601	7107 641008	FACTORY	2 9	TES EDCLIFF NO 108892-7	• • • • • • • • • • • • • • • • • • • •	_
FAILURE MODE- FAIL TO C LOOME RECEPTACLE WHILE	TO OPERATE. MO CUTPUT, CAUSED BY A BROKEN PIN ON THE RECEPTACLE. POSSIBLY CAUSED BY THISTING THE	EN PIN ON THE RECEPT	ACLE. POSSI	IBLY CAUS	8	THESTERS THE		
CORECTIVE ACTION-IN RE N.WE NOT AND THAT THIS U HAWGED TO REQUINE THAT I	COMPECTIVE ACTION—IN BEPLY TO BAR SLV-AS-DA-3874 WENDOR SAID IT IS STANDARD PROCEDURE TO APPLY STYCAST TO THE RETAI N.W. MUT AND THAT THIS UNIT WAS MISSED-AN OVERSIGHT. RAR-AS-DA-8024 RECOMMENDED THE ACCELEROMETER SPECIFICATION BE C HANGED TO REQUINE THAI STYCAST BE ADDED TO THE RETAINING MUT.	10 17 13 STANDARD PY -04-8024 RECOMMENDED T.	OCEDURE TO THE ACCELS	APPLY B	TCAS SPEC	STANDARD PROCEDURE TO APPLY STYCAST TO THE RETAINECOMMENDED THE ACCELEROMETER SPECIFICATION BE C		
AUTOPILOT-SOUAE-A/8	LV-AB-JA-4814P BTAGIWG ACCELEROMETER	FAR (14099-5	1960 641003	FACTORY	ů ç	YES EDCLIFF NO 104688-9		
FAILURE HODE-ERRATIC OF CM. FAILURE IS AITRIBUTE	FAILUME HODE-ERRATIC OPERATION. MONITORED BIGNAL DEACTIVATED TWICE FOR APPROXIMATELY D.1 BECOMD JUST AFTER ACTIVATE On. Pailume is afributed to an unsclucaed lead.	ED THICE POR APPROAT	MATELY 0.1	960398	5	AFTER ACTIVATE		
	ASSESS OF THE PERSON STATES THE PERSON STATES THE SOURS OF STATES	STATED THAT BOLDER	OPERATOR CL	A 8.3C %	¥	EEN CONDICTED.	1	i,
S. OPERATOR AND INSPECTOR	AN OPERATORS AND INSPECTORS AND MENTIFIED TO MAPE, PROC. 188 B. GA BUNYELLANCE INSPECTION IS PERFORMED ON FINAL	150 B. 64 BURNETLL	INCE INSPECT	11 MO11	Q and	NHED ON FINAL		
						PASK OLD		
	PARTIES . PRINCE		THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.			The second secon	1	

GENERAL DYNAMICS CONVAIR DIVISION

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DIFFICIALISE REVIEW-AUTOFILOT SYSTEM-AIRBORNE

SENERAL DYNAMICS CONTAIR DIVISION

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	Marer and	TESTREPORT NUMBER PAILED COMPOSENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE BITZ DATE DIF TIME DIF	21.0 3v17	ž č	VENDOR NAME	<u> </u>	
	CORRECTIVE ACTION- SURVEY MERE CHECKED FOR INSERT I	CORRECTIVE ACTION-SURVEY INSTRUCTIONS NO 183-64 RETURNED ALL LYSTS ASSOCIATED WITH LOTS 26, 27, AND 26. THESE UNITS MENDOR TO INSURE THAT INSERTS DO NOT BECOME CONTAMINATED, MET. AND 28 MERE RELEASED TO PRODUCTION. CARR 5583-TO	L CHITA ABSCHATE :	ATH LOTS ;	M. E7. A	5 20 100	THESE UNIT	*******	
	AUTOFILOT-SQUARE-A/B	FRET-340E CHOKE-TRANSFORMER TYPE OPERATION, DURING PET TENT OF LOS	UTP-PET ET-04160-1	9 116079	2/03	20	A.C. ELECTRONS	200	
	THE CRACK WAS APPROADED.	THE CRACK WAS APPROXIMATELY 1/8 INCH LONG. THE FRACTURE IS SPECINEN DURING INCRED DURING EACH CYCLE OF THE IMAGRSION TEST. 7. THE CRACK WAS APPROXIMATELY 1/8 INCH LONG. THE FRACTURE IS BELIEVED TO HAN' OCCURRED DURING THE IMAGRSION TEST.	EO, DURING INSERSIO E TEST SPECIMEN DURI BELIEVED TO KAN' OCCI	W TEAT, PA	74. 4.7. SLE OF TH M THE TH	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AL AIR BUBBL ERSION TEST. CYCLING TES		
	CORRECTIVE ACTION-ECP 7868 9 RETROFIT OF THICE B ISSUED TO REJECT ALL PART AVIORILOT-SQUARE-AC	CORRECTIVE ACTION-ECP 7068 MORKED TO REPLACE THIS WINDOR FOR THIS PART NO DURING INTERIM. SURVEY 133-64 SUFFICED FO B ISSUED TO REJECT ALL PARTS OF LOT 20 NOT INSTALLED ON CINCUIT BOARDS. REF. FR 654-2-399.	THIS PART NO DURING GO/C DOUBLE STANTED IT BOARDS, REF. FR	INTEASH. PARTS. SUN 54-2-399.	AURWEY 13 WEY INSTR	3-64 0C710	SUFFICED FO		
		TRANSFORMER	U7P-PET	40,00 to/c		3 A.C	YES A.C. ELECTRONS		
	FAILURE MODE-OUT OF TOLERANCE. DISCREPANCIES, ONE SPECINEM MAD MIS MAS CAUSED BY MANUFACTURING	DUSTING FINAL TEST OF PET LOTS WIDS IN POLITING COMPOUND AND PROCEDUPES NOT POLLCHED CORRE	ES AND ES. INTERNAL THE OTHER SPECTHEN I	INSI CTIO	NO F REVEALED	១ភ្នំ គ្គ គ	FOLLOWING WINDING. T		
,	CORRECTIVE ACTION-SURVEY IN LED ON CIRCUIT POANDS. ECP 7	CORRECTIVE ACTION-SURVEY INSTRUCTIONS 120-64 NERE 188UED TO REJECT TO VENDOR ALL PARTS OF LOTS 25 AND 26 NOT INSTAL	EJECT TO VENDOR ALL.	PARTS OF 1	O78 85 AN		HOT INSTAL		
	ALCOHOL: ALCOHOL: ALG	41-410-01-848 CC	CONTOBITE-FREZOR 2450	1¥ 03	157				
	FAILURE MODE- FAIL TO CHERA 8 AFTER SCHOOLSE NO. E (INBURY NAMED CONTRACTOR	PAILURE MODE- FAIL TO CHERATE AT PRESCRIBED TIME, BODBTEN NO. I EMGINE RESPONDED TO A ROLL PROGRAM IMPUT D.S SECOND.	4 EMEINE RESPONDED '	640903 0 TO A MOLL	NO PROCERE I	5	0.8 atcom		
	WENTELE EFFECT-CONTON STATE TOO LAYE.	718 TOD LAYE. AYES.							
	CORECTIVE ACTION-LORINGIAN IA	GOME CACCOLD LODE TEST IMS 601.							
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	SITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	YES A.C. ELECTRONS NO CS ACS479 IS 10K MEGONS, MS LSO PINS 3-4-9 TO	O. 115-64 AND PART D TO REPLACE VENDO YES A.C. ELECTROMI	CS ACSA79 OTTOM G. THE D.D1 INCHES D FOLLOWED.	TO REPLACE THIS V TO REPLACE THIS V TES A.C. ELECTHONI NO CS A.10. THE TEST SPE NCH POUNDS HINIMUM	IMSERT STREM	100
	# 5 6 0	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	16 50 TES	5 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 TO 11 TO	9 9 5 0 N	
	117E DIF	GO/C TOLERANCE COHIS AND	RUCTIONS 7858 MORN FD/C	ING FROM	SE MORTE 60/C 61: PARA.	T POLLON	
¥	VEHICLE DATE DIF	440887 4.4. THE 7.8 K HEGA	ALBO ECP 1	BLES PLONI	VEY INSTRU LSO ECP 76 640807 REMETH TES	ES MERIE NO CO 64 MERIE NA 10. 1310 640730 N 80081GR	i
PILOT SYSTEM-AIRBOR	DIF DATA BOUNCE	UT-PET E7-D4168-1 TEST OF PARAGRAPH 1-E TO MOUNTING AS	T 47 SURVEYED BY 8U TH LOTS 45 AND 47. (R 654-2-384A.	ET-D416E-1 HERE NERE SMALL BUBI TION DIOCLOSED A SM PROCEDURES AT VEND	45 SURVEYED BY SURVEYED BY SURVEYED BY AND 47. A. F. F. F. 454-E-3844. UTP-PET RT-04148-1 SY DURING INSERT BY POUNDS. REQUIRED TO	HE POTTING PROCEDURE DON. ALL UNITS OF LA TON. REF. FR 854-E- CONFOSITE-FACTORY TON MAS INDICATED O	REGUIRED. IFIERS MERE REPLACE
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TEST/REPORT HUMBER FAILED COMPOMENT NAME	UTP-PET 640827 , 60/C TES A.C. ELECTRON TRANSFORMER TANNSFORMER EPOSTS TO CS ACCOUNT OF TOLERANCE IS SON MESONMS. HINDER WAS ACCOUNT OF TOLERANCE IS SON MESONMS. HINDER AS A REQUIREMINATION OF TOLERANCE WAS MESUNED AT PIN 1-E TO MOUNTING AS 7.E K MESONMS AND ALSO PINS 3-4-9 TO MOUNTING AS 7.E K MESONMS AND ALSO PINS 3-4-9 TO	CORRECTIVE ACTION-TESTING STOPPED. LOTS 45, 46, AND THIS LOT 47 SURWEYED BY BURNEY INSTRUCTIONS NO. 515-64 AND PARTS REJECTED TO THE WENDOR. LOT 46 REJECTED FOR ASSOCIATION WITH LOTS 45 AND 47. ALSO ECP 7656 WORKED TO REFLACE VENDOR R FOR THIS PART NO. CARR NO. 5356 WAS BENT TO VENDOR. REF. FR 654-2-394A.	FAILURE MODE-STRUCTURAL. DURING INMERSION TEST, PARA 4.8, THERE WERE SHALL BURBLES FLOMING FROM THE BOTTOM G. THE TEST SPECIMEN DURING THE TEST SPECIMEN DURING THE TEST SPECIMEN ON THE BOTTOM G. THE TAST SPECIMEN ON THE BOTTOM G. THE TAST SPECIMEN. CAUSED BY POTTING PROCEDURES AT VENDERS FACILITY NOT GEING FOLLOWED.	CORRECTIVE ACTION-TESTING STOPPED. LOTS 48, 47 AND THIS LOT 43 SURVEYED BY SURVEY INSTRUCTIONS NO. 115-64 AND PARTS REJECTED TO THE VENOR. LOT 46 REJECTED FOR ASSOCIATION WITH LOTS 45 AND 47. A.SO ECP 7866 WORKED TO REPLACE THIS Y MADOR TOR THIS PART NO. CARR NO. 5536 MS SOUT TO VENOR. REF. FR 644-2-3944. TOPILOT-SQUARE-A/B 2743710 NO. CS THAMSFORMER REPLACE DURING PET LOT NAMBER 64 TEST DURING INSERT STRENGTH TEST, PARA. 4.10. THE TEST SPE JACK STRENGTE FORM TO PAIL LOOSE WITH A TORGE OF 8-0 INCH POUNDS. REQUIRED TORGUE 18 3-7 INCH POUNDS HINIMUM	CORRECTIVE ACTION- ECP TREE WORKED TO REPLACE THIS ITEM VENDOR, ALL UNITS OF LOT 66 WERE RESIDENCED TO INSERT STRENG THE TEST, CARE NO. 3485 MAS MENT TO VENDOR FOR CORRECTIVE ACTION, REY, FR 854-8-410. UTOFILOT-SAUGRE-A-S AGUSS-DOI-18/FC-CO-01-0302-DO7 COMPOSITE-FACTORY 1310 NO 640730	SYSTEM EFFECT-MOME. VEHICLE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE RETEST WAS REQUIRED. CORRECTIVE ACTION-THE (SSE) RECORDER AND ASSOCIATED PREAMPLIFIERS MERE REPLACED.
		FRETASTOL TRANSFORMER LERANCE, DURIN OUT OF TOLERAN	THE STOPED. R. LOT 46 RE R. NO. 3536 W	TRANSFORMER TRANSFORMER L. DURING IN-C FIRST 15 MINU	THE STOPPED. LIST LOT 46 REJECTOR NO. 5536 E743710 THANSFORMER, DURIT	AC TO DEPECTIVE POTTING ECP 7454 WORKED TO REP 495 MAS BENT TO VENDOR A6443-DOS-18/FC- DURING OPERATION-NOISE THE TEST, PROBLEM DAE	TE RESCHED
10 JUN 1000	818 TEN 818 - 878TEN	AUTOFILOT-SQUARE-A/B FAILURE MODE-OUT OF TOW NIW-MAS A REQUIREMENT-OF MOUNTING AS 7.6K MEGONN	CORECTIVE ACTION-TEST S REJECTED TO THE WENCHOOF R FOR THIS PART NO. CARL	TANNSKY FAILURE MODE-STRUCTURAL, DURING EST SPECIMEN DURING THE FIRST 15 AMETER ON THE BOITGH OF THE TEST	CORRECTIVE ACTION-TEST: REJECTED TO THE VENOR EDOOR TOR THIS PART NO. AUTOFILOT-SQUARE-A/B FAILURE NODE- OUT OF TO CHENS HASER BEGAN TO 1	CORECTIVE ACTION- ECP TH TEST, CARR NO. 3485 1 AUTOFILOT-SQUARE-A/B FAILURE MODE-FAIL DURIN	BYBTEM EFFECT-MOME. VEHICLE EFFECT-COMPOBIT CORRECTIVE ACTION-THE

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORNE

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\$727EX \$6\$-1727EX	TEST/REPORT MUMBER FAILED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE DATE DIF		SITE PRI VENDOR NAME	VENDOR NAME		
INTOPILOT-BOLINE-A/B	A6443-001-18/FCC0-01-0302-007 RELAT	COMPOSITE -FACTORY	1318	PACTORY	5 3		0.35.00	ç
FAILURE MODE-FAIL TO OF	FAILURE MODE-FAIL TO OPERATE. NO CUTPUT MAS EVIDENT PROM THE VERNIER R. PITCH PEEDBACK TRANSDUCER DUE act F-b of Dimanic Calibrate Re.at Kais.	E VERNIER R PITCH F	EEDBACK TI	IAMSDUCER	DUE TO AN	TO AN OPEN CUN		
STATEM EFFECT-MOME. WENICLE EFFECT-COMPOSITY SATISFACTORY.	SYSTEN EFFECT-MOME. Wenicle Effect-Compusite nescheduled, a second composite test was performed during union vermier mumber e pitch was satisfactory.	ST IMS PERFORMED DU	2106 MIG	. VERNIER	***************************************	PITCH MAS		
CORRECTIVE ACTION-6SE R.	CORRECTIVE ACTION-636 RELAT RAIG WAS REPLACED. ITOPILOT-38UARE-A/B ETASSEA	134-410	640716	5/93	YES A.C.	TES A.C. ELECTRONI	*****	
FALLURE MODE-STRULTURAL ER (TERMIMAL SIDE), TEST	HANDSCREAM ACSEA . FOLLOWING INCRESCON TEST, PARA, 4.8, A CRACK IMS FOUND ON THE BOTTON FACE OF THE TRANSFORM UNIT WAS FROM LOT 60.	F. A CRACK MAS FOUND	8	OTTON PA	ACSON THE OF THE T	4 TRANSFORM		
COMPECTIVE ACTION-PRT LOT 654-2-345.	OF 80 REJECTED TO VENDOR. ECP 7868 ELIMINATES THIS VENDOR AS SUPPLIED OF	LINIMATES THIS VEND	4 AS 84 W	5 8 5	THIS PART. REF.	MCT. TH		
	ANT. IF IER		840515		2	-		
FAILURE MODE-OUT OF TOLI 68E SIGNAL.	ENANCE. THE BODSTER NO. 1 PLTCH TORBUING GAINS MERE EXCESSIVE, DUE TO IMPROPER SETUP OF THE	UING GAINS MERE EXCI	ISSINE, DU	T 10 EN	OPER SETU	7 THE		
BYSTEN EFFECT-OPERATION	то ніен.							
WEHICLE EFFECT-COMPOSITY	E RESCHEDIALED, PARTIAL COMPOSITE RETEST WAS REQUIRED.	EST MAS REQUIRED.			•			
CORRECTIVE ACTION-THE AGE TORFUING	GE TORFUING POTENTIONETER MAS RECALIBRATED.	DRATED.						
UTOFILOT- SEUARE-A/8	69A3167 TRAHSFORMER	UTP-PET 27-04394-1	640403	3/ 03	YES THERMADOR NO TCS-20100	ADOR 0100	****	
FAILURE MODE-BTRUCTURAL. A TERMINALD 3: 4, AND 5: THE NALD 1 AND 2, THE CAUSE OF TECHNIGUE.	. AFTER THE THERMAL BHOCK TEST ONE TEST BPECIMEN HAD SEVERAL SMALL CRACKS ALONG THE OTHER OF THO SPECIMENS AFTER THERMAL SHOCK TEST HAD A SMALL CRACK ALONG THE SIDE OF THIS FAILURE IS LAKMOMAL ALTHOUGH POTTING MATERIAL ASSUMED DEFECTIVE DUE TO POOR	EST BPECIMEN HAD SE'S AL BHOCK TEST HAD A POTTING MATERIAL A	FRAL SHALL CR	L CRACKS ACK ALOWG ECTIVE DU	ALONG THE THE SIDE E TO POOR	SIDE BY BY TERNI POTTING		
CORRECTIVE ACTION-LOT 5 PET LOT 8 PASSING TESTS:	RETURNED TO VENDOR. THE VENDORS PRESENT	VENDOR HAD REVIEWED AND REVISED HIS POTTING PROCEDURES. POTTING PROCEDURES ARE ADEQUATE. REF. FR 654-E-(161)A.	F. FR 454	PROCEDUAL -8- (161)	9 V 4 :	PASIS OF		
				- W. Anthern Andreading to Angeles State (Angeles S		PAGE 0110		

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

BUS-SYSTEM	TEST/REPORT SUMBER FAILED CONFORMS NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE	PRE VENDOR NAME	
AUTOFILOT-BRURKE-A/B	27-3430 TRANSFORMER	UTP-PET E7-04573-1	4403E3 40/C	YES CAL. MAG. CORP. NO . 39C708	*****
FAILURE MODE-OUT OF TO. E OF POOR WORKMANSHIP. T	FAILURE MODE-OUT OF TOLERANCE. TEST SPECINEN REPRESENTING LOT 11 DURING VISUAL INSPECTION, PARA: 4.1, HAD APPEARANC E OF POOR WORKMANSHIP. THE POTTIME AROUND BOTH INSERTS APPEARED TO BE INCOMPLETE.	OT 11 DURING VIBUAL RED TO BE INCOMPLET	INSPECTION, PAR E.	A. 4.1, MAD APPEARANG	
CORRECTIVE ACTION-THE W ROTHING OF THE EPOXY HOLY WENCOR STATED THAT THE M 834-R-238 SUPPLEMENT A.	ENDOR WAS CONTACTED BY VCAR 8340-64 DING COMPOUND, THEREBY CAUSING VERY OLDING MATERIAL MILL BE 61VEN EXTRA	AND REPLIED THAT TH SHALL VOIDS AROUND VACUUM CYCLING BEFG	E CAUSE OF THE F. INSERTS AND IN P. ME SEING INTRODU	AND REPLIED THAT THE CAUSE OF THE FAILURE MAS PROBABLY F. SHALL WOIDS AROUND INSERTS AND IN POTTING MATERIAL. THE VACUUM CYCLING BEFORE BEING INTRODUCED TO MOLDS. REF. FR	-
AUTOFILOT-MENARC-A/B	R7-5348 TRANSFORMER	UTP-PET E7-01307-1	640319 60/0	YES CAL. MAG. NO 40952	:
FAILURE HODE-OUT OF TOL HO WERE HEASURED AS 0.07 GMATION MAS DUE TO TIGHT	FAILURE MOE-OUT OF TOLEBANCE, CASE SIDE EDGES OF TEST SPECIMEN ARE SPECIFIED AS 0.13 PLUS 0.03 MINUS 0.03 INCHES A NO WERE MCASURED AS 0.078 INCHES, ALSO, IMPREMATION OF WINDING MAS INCOMPLETE BY ABOUT 80 PERCENT, INCOMPLETE IMPRE GMATION MAS DUE TO TIGHT MINDING AND SEALING EFFECT OF WILAR TAPE.	INEN ARE SPECIFIED ING MAS INCOMPLETE TAPE.	AB D.13 PLUS D.0 BY ABOUT SO PERC	S MINUS D.03 INCHES A EMT. INCOMPLETE IMPRE	
CORRECTIVE ACTION-VENOC CTION. VENOR REPLIED BY POSSIN WALL AND MAKE PS N POSSIBLE IF UNIT IS NO	MOOR WAS INFORMED OF THE DISCREPANCIES AND REQUESTED TO TAKE APPROPRIATE ACTION ON FUTURE PRODU BY STATIME, BOBBINS WITH HOLES OR SLOTS WILL BE USED IF PRACTICAL. IN SOME CASES, HOLES WEAKEN HOLDING LANIMATION GAP IMPOSSIBLE, HYLAR TAPE NARROWER THAN THE BODBIN HEIGHT WILL BE USED WHE HOT TOO SMALL, REF. 854-2-215.	AND REQUESTED TO TA S WILL BE USED IF P AR TAPE NARROWER TH	re appropriate a Ractical. In Som Ian the Bodrin He	CTION ON FUTURE PRODU E CASES, HOLES WEAKEN EGIT WILL BE USED WAS	-
AUTOFILOT-SQUARE-A/2	27-3364 TRANSFORMER	UTP-PET E7-04146-1	640311 60/C	YES THERMADOR NO TCS-70043	•10200
FAILURE MODG-STRUCTURAL. MIDTH CRACK APPONIMATELY	FAILUKE MODG-STRUCTURAL. DURING VIBUAL INSPECTION FOLLOMING THERMAL SHOCK TEST, PARA.4.7, TEST SPECINEN HAD A SHALL MIDIH GRACK APPOXIMATELY 1-INCH IN LEMETH ON THE BIDE OF THE BODY DIRECTLY THROUGH THE VEHOOR NAME.	. THERMAL SHOCK TEST E BODY DIRECTLY THR	, PARA.4.7, TEST OUGH THE VEHDOR	SPECINEN HAD A BHALL. NAME.	
CORRECTIVE ACTION-NET L	CORRECTIVE ACTION-MET LOT NO. 16 REJECTED TO VENDOR, A BTUDY OF TEST REQUIREMENTS WAS MADE TO DETERMINE THE FEASIBLE	Y OF TEST REQUIREDA	NTS WAS MADE TO F. FR 654-E-214A	DETERMINE THE FEASIBLE	
AUTOPILOT-SQUARE-A/8	ET-S200 TRANSCOREC	UTP-PET ET-04333-3	640308 60/C	YES TRANSONIC NO TRESIA	******
FAILING HODE-OPEN (ELECT.). DU DARY MINDING AND THE SHELL. THE ECINCH SHALL WITH STAND A POIEN ATION. ON ARCING. CAUSE UNKNOWN	FAILINE HOGE-OPEN (ELECT.). DURING DIGLECTRIC STRENGTH TERT, THERE WAS AN INSTANTANGOUS BREAKDONN BETWEEN THE SECON LARY MINDING AND THE SHELL. THE D.C. RESISTANCE WAS APPROXIMATELY SOCIOHHS. SPECIFICATION REQUIREMENT IS THAT THE SP CINCH SHALL MITH STAND A POTENTIAL OF BOYNHS AT 6D CPS FOR NO! LESS THAN S SEC WITHOUT BREAKDOWN, PUNCTURE OF INSUL.	, THERE WAS AN INST MTELY 500 CHMS, SPE NO? LESS THAN 5 SEC	ANTANEOUS BREAKD CIFICATION REGUI WITHOUT BREAKDO	NSTANTANEOUS BREAKDONN BETWEEN THE SECON SPECIFICATION REQUIREMENT IS THAT THE SP SEC WITHOUT BREAKDONN, PUNCTURE OF INSUL	
CORRECTIVE ACTION-LOT 8 ALSO TO CORRECT FAULTY	CORRECTIVE ACTION-LOT 9 PAF 18 MANUFACTURED AFTER MARCH 1883 MERE REJECTED AND RETURNED TO VENDOR FOR REMORK. VENDOR ALSO TO CORRECT FAULTY GUALLITY CONTROL PROCEDURES, REF. FR-854-E-183 A.	NERE REJECTED AND 854-2-103 A.	RETURNED TO YEND	OR FOR REMONS. VENDOR	

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DIFFICUATIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

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JACE VEHICLE SITE PRI VENDUR NAME	64030E 607C TES TAXHSONIC 00	FAILURE MODE-STRUCTURAL, DURING IMMERSION TEST BUBBLES MERE COSERVED COMING FROM LOCATION BETWEEN FIN K AND THE SHE END LL OF UAJE, BUBBLES WERE APPROXIMATELY 1/8 INCH DIAMETER AND OCCURRED AT 10 SECOND INTERVALS FOR 10 NIMUTES BEFORE R ENOVAL. THE CAUSE OF THIS DISCREPANCY IS UNKNOWN. CORRECTIVE ACTION-LOT 9 PARIS NAMERACTURED AFTER MARCH 1863 MERE REJECTED AND RETURNED TO WENDON FOR REMORK. VENDOR ALSO TO CORRECT FAULTY QUALITY CONTROL, PROCEDURES, REY, FR-634-2-1934.	E7-3E88 TRANSFORMER TRANSFORMER TOLENANCE. EXCITATION CURRENT RECORDED FOR THE TRANSFORMER MAS ZE MA. SPECIFIC: TICN TOLENANCE I	CORRECTIVE AC. "CH-LOT 9 PARTS HAMIFACTURED AFTER HARCH 1983 MERE REJECTED AND RETURNED TO VEHOOR FOR REMORS. VEHOOR ALSO TO CORRECT FALLITY GUALITY CONTROL PROCEDURES. NEF. FR-654-2-193 A.	89-3187 TRANSFORMER E7-04384-1 TRANSFORMER E7-04384-1 DURING THERMAL SHOCK TEST THE TEST SHEED KE TO FOOM FUTTING TECHNISHE. ALTHOUGH POTTING MATERIAL ASSUMED DEFECTIVE DUE TO POOM FUTTING TECHNISHE.	CORRECTIVE ACTION-TWO OTHER UNITS SELECTED FROM LOT 1 AND BUBJECTED TO PET ONLY. QUALITY ASSURANCE NEGOTIATED WITH ENDOR TO IMPROVE POTTING TECHNIQUES. REF. PR 054-2-181.	FAILURE MODE-BYRUCTURAL, THERE, THE THE THE THE THE TEST SPECIFE WAS TRANSCONIC FAILURE MODE-STRUCTURAL, THERE, THE THE THE THE THE TEST SPECIMEN BURING THE OVERLOA TO VENDOR MOT USING PROPER POTTING MATERIALS BUT TO A MUCH LESSER DEGREE, THIS FAILURE WAS ATTRIBUTED TO VENDOR MOT USING PROPER POTTING MATERIALS AND TECHNIQUES.	CORRECTIVE ACTION-IT WAS RECOMMENDED TO FLY CHIEF ENGINEERS WAS REVIEW COMMITTEE TO REPLACE THE UNBUALIFIED PART BY -04396-1 WITH A GUALIFIED PART EY-0417F S. THIS WAS DISAPRONED BY COMMITTEE, A DECISION WAS NOT TO THE OFFICE AND THE NATURES (-S DECREES TO -160 DECREES F) RATHER THAN MIL-Y-ETA, REF. FR-654-E-510-SUPPLENT A
DIF DATA BOURCE PART NUMBER	UTP-PET E7-04359-3	MERE COSENVED CONT AND OCCURRED AT A 1845 WERE REJECTED FR-634-2-1934.	UTP-PET E7-04335-3 DED FOR THE TRANSF	1963 NEME MEJECTED FR-654-2-193 A.	ET-04394-1 ET-04394-1 TEST SPECIMEN CHING MED DEFECTIVE DUE	ND BUBJECTED TO PE	UTP-GUAL/PPT ET-04386-1 ATERIAL PROM A CRI ST, BUT TO A MUCH	EERS HAP REVIEW CO PROVED BY COMIT! L-T-E7A, REF. PR-6
TEST/REPORT NUMBER FAILED COMPOMENT NAME	RY-USBB TRANSFORMER	FAILURE MODE-STRUCTURAL, DURING IMMERSION TEST BUBBLES WERE COSERVED C. LOF UAJE, BUBBLES WERE APPROXIMATELY 1/8 INCH DIAMETER AND OCCURRED A MOVAL. THE CAUSE OF THIS DISCREPANCY IS UNKNOWN. CORRECTIVE ACTION-LOT 9 PARIS MANUFACTURED AFTER MARCH 1863 WERE REJECTALS TO CORRECT FAULTY QUALITY CONFROL PROCEDURES, REF. FR-654-2-1934.	E7-3288 TRANSFORMER TOLENANCE. EXCITATION CURRENT RECORDE CAUSE OF THIS DISCREPANCY IS UNKNOWN.	PARTS MAMEACTURED AFTER MAICH HALLITY CONTROL PROCEDURES. REF.	89-3187 TRANSFORMER TRANSFORMER SHOCK TEST THE A ALTHOUGH POTTING MATERIAL ASSU	CORRECTIVE ACTION-TWO OTHER UNITS SELECTED FROM LOT 1 A	69C318Z TRANSFORMER RAL. THERE WAS LEARAGE OF FILLING MATERI, PRESENT AFTER THE THERMAL SHOCK TEST, B PROPER POTTING MATERIALS AND TECHNISHES.	S RECOMMENDED TO S.V CHIEF EMGINEERS MAP REVIEW COMMITTEE TO REPLACE THE PAST ET-0417F S. THIS MAS DISAPPRONED BY COMMITTEE, A DECISION WAS MAD +140 DECREFS P) RATHER THAN HIL-T-27A. REF. FR-654-E-110-SUPPLENT A.
STATEM BUS-8787EM	AUTOFICOT-SAUARE-A/B	FAILURE HODE-STRUCTURAL. LL OF UAJE, BUBBLES HERE. EMOVAL. THE CAUSE OF THIS CORRECTIVE ACTION-LOT 9 ALSO TO CORRECT FAULTY 8	AUTOFILOT-SQUARE-A/B FAILURE MODE-OUT OF TOLE B ED M. MAXIMUM. THE CAUS	CORRECTIVE AC. TON-LOT 9 ALSO TO CORRECT FAULTY &	AUTOFILOT-SQUARE-A/B FAILURE MODE-SYRUCTURAL. CAUSE OF FAILURE INSMOM	CORRECTIVE ACTION-THD OF	AUTOFILOT-SQUARE-A/B FAILURE MODE-STRUCTURAL. D TEST, THE CRACK WAS PRE TO VENDOR MOT USING PROP	COMPECTIVE ACTION—IT WAS RECO- -04386-1 MITH A SUALIFIED PART MPCAATURES (-\$ DECREED TO +140

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1040	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	FILOT SYSTEM-AIRBORI	-			
8781EX 8U8-878X	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BIT	T O L	TIM, DIF OTH VENDOR MANE	
UTOFILOT- SQUARE-A/B	LV-8D-04-4681F AWLIFIER, CAPACITON	FAR R7-41645-8	1990 FACTORY	MY YES		******
FAILUME MODE-ERRATIC OM Mily Omen-Circuited Tamiy Cabe.	OPERATION. VERHIER 1, YAM/ROLL OUTPUT WE ERRATIC DURIM. VIBRATION. CAUSE DUE TO AN INTERNITE NTALUM CAPACITOR. THE TANTALUM SLUG IN THIS CAPACITOR WAS NOT FIRMLY SOLDERED TO THE CAPACITOR	OUTPUT MES ERRATIC DURING A	VISRATION, CAUSE DUE B NOT FIRMLY SOLDERED	LE DUE TO	TO AN INTERNITIE TO THE CAPACITOR	
CORRECTIVE ACTION-CONFIRMED, IN LOCATE AND AUTHORIZE SCRAPPING A A RECOMMENDATION, STILL IN THE P RY APPROVED ONLI-C-R068383 UNIT.	CORRECTIVE ACTION-CONFIRMED. IN REPLY TO RAR LV-89-04-3888 A SURVEY INSTRUCTION 55-64 MAS ISSUED ON DATE 640501 TO LOCATE AND AUTHORIZE SCRAPPING ALL TEXAS INSTRUMENT SYM TANTALUM CAPACITORS CLDER THAN 1962. THIS MAS ACCOMPLISMED. A RECOMMENDATION, STILL IN THE PROPOSAL STAGE, MAS MADE TO REPLACE THE COMMERCIAL TANTALUM CAPACITOR WITH THE MILITA	A SURVET INSTRUCTION ALUM CAPACITORS CLDE EPLACE THE COMMERCIV	1 55-64 MAS IS. R THAN 1962. L TANTALUM CAI	NUED ON D	ATE 640501 TO ACCOMPLISMED. ITH THE MILITA	
FAILURE MODE-STRUCTURAL, MINALS) WAS INDICATED ON E (INTERNAL) PROBABLY DU	TRANSFORMER TRANSFORMER TRANSFORMER TRANSFORMER TRANSFORMER TRANSFORMER TRANSFORMER TRANSFORMER TRANSFORMER TO LINE MODE-STRUCTURAL, FOLLOWING THE PHOCK DURING WINDING CONTINUITY TEST, AN OPEN SECONDARY WINDING 13-4 TER THALS HAS INDICATED ON ONE SPECIMEN OUT OF SIX TESTED SIMULTANEOUSLY, CAUSED BY PHYSICAL BREAKAGE OF COIL LEAD WIR	UTP-PET E7-D4164-1 D1MG CONTINUITY TEST LTAMEOUSLY, CAUSED 8 CK TEST,	640103 60/C , AN OPEN SECC IY PHYBICAL BR	YES NO NDARY WI CARAGE OF	APPLIED COMPON ENTS ACI 2175 INDING 13-4 TER COIL LEAD WIR	*
CORRECTIVE ACTION-TESTING ENDOR FOR THIS PART NAMBER 0. IUTOFILOT-SQUARE-A/B	WE STOPPED TO GUALIFY THIS VENDOR FOR THIS PART AND NO FURTHER PPT TESTING PLANNED ON THIS VERSING THO OTHER VENDORS PLUS GD/C LRE NOW QUALIFIED PRODUCERS OF THIS PART, REF. 654-2-11 69-3118	ARE NOW QUALIFIED P	PRODUCERS OF THIS PART, REF.	ITHE PLA	REF. 654-2-11 60/C	
FAILURE MODE-STRUCTURAL, METH MERE MOTED, THE TEST RE NOT BEING CENTERED IN COMMECTIVE ACTION-PRODUC	TRANSFORMER 98-01014-1 FAILURE MODE-STRUCTURAL, DURING THERMIL SHOCK 1EST A SLIGHT BULGE AND TWO PERPENDICULAR CRACKS ABOUT 1/4 INCH IN LE WITH WERE MOTED. THE TEST SPECIFIED HAS CAUSED BY THE CO. E NOT BEING CENTERED IN THE MOLD AND THE POTTING NATERIAL NOT COMPLETELY MINED OR CONTAMINATED. CORRECTIVE ACTION-PRODUCTION PERSONNEL HAVE BEEN INSTRUCTED IN THE PROPER MANNER OF POTTING. AND QUALITY CONTROL PER	69-01014-1 BULGE AND TWO PERPE BLES IN THE AREA OF OT COMPLETELY MINED IN THE PROPER MANNE	NDICULAR CRACI THE BULGE. THI OR CONTAMINATI R OF POTTING.	is ABOUT a was Ca b.	1/4 INCH IN LE	
MEGMEL ADVISED ON PROPERTY COTES MILL BE PROPERTY UTOPILOT-SQUARE-A/B	NACOUNCEL ADVISED ON PROPER VETHOUSE FOR TEATING SEALING, PRODUCTION PERSONNEL HAVE ALSO BEEN INSTRUCTED TO ASSURE THAT COME. THAT POTTING WILL BE EVENLY DISTRIBUTED AROUND THE COMPONENT, REF. FR 854-2-102. UTD-WUAL/PPT 631216 60/C YES TRANSONIC RE-DASSES 18ANSONIC RE-DASSES 18ANSONIC NO TS-3021	CTION PERSONAEL HAVE MLY DISTRIBUTED AROU UTP-WULL/PPT ET-D4386-1	ALSO BEEN IN. ND THE COMPONE 631216 6D/C	TRUCTED	TO ASSURE THAT FR 654-E-10E. TRANSONIC T8-30E1	
FAILURE MOS ATTRIBUTED 1 FAILURE MAS ATTRIBUTED 1 CORRECTIVE ACTION-17 WH	FAILURE MAS ATTRIBUTED TO IMPROPER WENDOR POTTING MATERIALS AND TECNAHOUES. FAILURE MAS ATTRIBUTED TO IMPROPER WENDOR POTTING MATERIALS AND TECNAHOUES. CORRECTIVE ACTION—IT WAS RECOMMENDED TO BLY CHIEF ENGINEERS MAP REVIEW TO REPLACE THE UNGUALIFIED B7-04396-1 MITH A	AND TECHNIQUES. AND TECHNIQUES. NAP REVIEW TO REPLA	CRACKED ON FIL	re 1681 8	PECINEMS. THIS D4896-1 MITH A	
					PASE 0113	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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VEHICLE BITE PRI VEHOOR PART NO	MITA TO GIRO TEMPE	YES TANNSOMIC NO TSSOZA	ID-LOAD EXCITATION	YES A.C. ELECTRONI NO CS ACS478 LGGSE AND THE PRIN IF LOT NO.19.	N S/N RAME OF 308	NO CS ACSA78 HEN HAU POTTING NA L. CASE SIDES HOT P IING CONTACTMATION SARE TO BE HELD P P 7886 HAS WORKED 4-2-055 SUPPLEMENT	YES TRANSOMIC NO TS-SOEL THE CRACK MAS ABO ERT STREWSTH TEST.	0E0 BY BUALITY A89
VEHICLE BITE DATE SIF TIME DIF	W.ZE WAS TO TEST (631£1 0 60/ C	(A. 4.8.2.1; .(AD h	ESILEL GO/C RHINAL PIN DECANE RT STRENGTH TEST-C	PECTED UNITS WITH!	OT 43, TEST SPECI- ITHER- ILLINTERMA TR CLEANING, ALLON TRENDOR PET LOT A TRENDOR PET LOT A TRENDOR PET LOT A TRENDOR PET LOT A	BBIIDE 60/C THE OVERLOAD TEBT. END FAILED THE INS	UMED, TO BE ATTEN
DIF DATA SOUPCE PART NUMBER	EW COMMITTEE, A DECISION P.	UTP-QUAL/FPT R7-04396-1	K. CAUSE UNKNOWN. A. CAUSE UNKNOWN. T A LATER DATE 12-18-65 AN	UTP-PET E7-D4161-1 , PARA, 4.9, A PRIMARY TER THE TERHIMAL DURING INSER	FESTS. REF. FR-654-E-067.	EXTERNAL VISUAL/MECHANICAL INSPECTION OF LOT 43, TEST SPECIMEN HAD POTTING NA. COT THE FOUR CORNERS. THIS WAS CAUSED BY EITHER— (1) INTERNAL CASE SIDES HOT P. ED PROPERLY, OR (3) INPROPER HANDLING AFTER CLEANING, ALLONING CONTACTION EN MAS PLACED INTO TEST. ALL UN'TS BY THIS YENDOR PET LOT AS ARE TO BE HELD P. RESIGNOR ALSO CONTACTED REGUESTING CORRECTIVE ACTION, REF. 654-2-055 SUPPLEMENT	UTP-PET E7-04396-1 CRACK OH ONE END DURING T HER LONG, TWO TEST SPECING	ERHINE DISPOSITION ON PAIL
TEST/REPORT NUMBER FAILED COMPONENT NAME	QUALIFIED 27-04135-3. THIS IMB DISAPPROVED BY IMP REVIEW COMMITTEE, A DECISION M. LE MAS TO TEST UNITS TO GYRO TEMPE RATURES (MINUS 5 DEG P TO PLUS 160 DEG P) RATHER THAN MIL-T-27A. HEF. PF-634-E-119 8 ^U A.	88C-318E TRANSFORMER	FAILURE MODE-OUT OF TOLERANCE, TEST SPECIMEN BURING EXCITATION CURRENT TEST, PARA. 4.8.E.I., .(AD MO-LOAD EXCITATION LARENT READING OF 213 Ma. THE MAXIMUM ALLONED IS 100 MA. CAUSE UNKNOWN. CORRECTIVE ACTION-TESTING CONTINED, SPECIMEN FAILED AT A LATER DATE 12-18-65 AND DISPOSITION WAS MADE AS REFERENCE. BY FR-654-2-119. REF. CTCTH ON TEST REGLEST 89C-318E 12-10-63.	ITOPILOT-SQUARE-A/B FREY-3071 UTP-PET 631121 60/C VES A.C. ELECTRONI TRANSFGRER 27-04161-1 R7-04161-1 NO CS ACSA78 ACCESTRUCTURAL, DURING TERNINAL PIN GECAME LOGGE AND THE PRIN MAY SERVINAL PIN GECAME LOGGE AND THE PRIN MAY MAY SERVEN TEST-OF LOT NO.19.	CORRECTIVE ACTION-SIX UNITS FOLND IN STOCK PROM LOT 19, REPRESENTING ALL OF SUSPECTED UNITS WITHIN S/N RANGE OF 308 0473 TO 306-0644, MENE SABJECTED TO TERMINAL STRENGTH TESTS, REF. FR-654-2-067. TOPILOT-SQUARE-A/S FR-27-3143	INANSFORMER ACSATA FAILURE WORE-OUT OF TOLERANCE, DURING EXTERNAL VISUAL/MECHANICAL INSPECTION OF LOT 43, TEST SPECIMEN HAD POTTING NA TERIAL SEPARATED FROM THE CASE AT THREE OF THE FOUR CORNERS. THIS WAS CAUSED BY EITHER- (1) INTERNAL CASE SIDES NOT P ROPERLY SANDBLASTED, (2) USIT NOT CLEANED PROPERLY, OR (3) IMPROFER MANDLING AFTER CLEANING, ALLONING CONTAATHATION OF THE SIDES. CORRECTIVE ACTION-A SECOND TEST SPECIMEN WAS PLACED INTO TEST, ALL UN'TS BY THIS YENDOR PET LOT AS ARE TO BE HELD P ENCING COMPLETION OF PET TESTING, PERSIENCY INCREASED TO 1/20 FOR LOTS 43, 44, AND 45 ONLY, ECP 7849 WAS WORKED TO REPLACE THE VENDOR OF THIS PART NO, VENDOR ALSO CONTACTED REQUESTING CORRECTIVE ACTION, REF. 654-2-055 SUPPLEMENT A.	TOPILOT-EQUARE-A/W 68-3148 UTP-PET 6311D6 6D/C YES TRANSONIC TRANSFORMEN E7-D4396-1 NO TS-30E1 FAILURE MODE-STRUCTURAL, ONE TEST SPECIMEN DEVELOPED A CRACK ON ONE END DUSING THE OVERLOAD TEST, THE CRACK LAMB ABO IT 5/4 INCHES BELOW THE THREAD INSERT AND ABOUT 1/2 INCHES LONG. THO TEST SPECIMENS FAILED THE INSERT STREWSTH TEST.	WETTIME SCHEDIALED FOR 51-7-65 TO DETERMINE DISPOSITION ON FAILURES, TO BE ATTEMBED BY QUALITY ASS
#34.64.6 #34.64.6	GUALIFICE 27-04175-3. THI	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLES CURRENT READING OF 213 NA. CORRECTIVE ACTION-TESTIM D BY FR-654-2-119. REF. CT	AUTOFILOT-SQUARE-A/B FAILURE MCGE-STRUCTURAL. ARY MINDING BCCAME OFEN. 1	CORECTIVE ACTION-SIX UNI- -0473 TO 306-0644, MERE 3A AUTOFILOT-SQUARE-A/S	FAILURE WORE-OUT OF TOLER THE ROPERLY SANDBLASTED, (g) (g) (g) (g) THE SIDES. CORRECTIVE ACTION-A SECONCIONING CONNECTION OF PRET TO REPLACE THE VENDOR OF TA.	AUTOFILOT-SQUARE-A/W FAILURE MODE-STRUCTURAL. UT 5/4 IMCHES BELOW THE TH	CORRECTIVE ACTION-WEETING

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	VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	0	YES TRANSONIC NO TS-3021	STABLES PPT TO	YES TRANSONIC NO TS-3021	PUT VOLTAGE A DING RESISTANC TION TECHNIQUE STABLISH A CON TESTS. PPT TO	7	F THE LOT. THE	VES A.C. ELECTRONI NO CS ACSASS BE CRACKED. DIELEC IS UNKNOWN.	PAGE 0115
Į.	# 5 F 5	7	ž 9	1 10 E	5 5	00-VIN 10-VIN 10-VIN 10-VIN	T L ET	10 E	2 M	
	117E	FT A10 1	3/ 03	T NO. 2 P	5/ 9	HATE, THAINGHAMAN WANTE, FA	GO/C TEST, PA ETRINENTA	DISPOSIT	FCINEN C	
¥	VEHICLE DATE DIF	1 SPECIAL	631020	MAD INSER- DS. PECIAL PE D, AND IN	631019	TO NETAL ING. ALBO I	#31007 OVERLOAD AND NO DA	IDENCE AND FORILY AND	631007 .8, 7687 8	
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRME	DIF DATA BOURCE PART NUMBER	UCTED WAS CONSIDERED !	UTP-QUAL/PFT E:-04596-1	ST. OME TEST SPECIFIEN STOCK AND PLACED IN STOCK AND PLACED IN STOCK AND PLACED IN STATEMENT A.	UTP-QUAL/PFT 27-04396-1	TEST ON WINDING 1-E D BREAKDONN AT 456 V 9 LEAKAGE PATH DUE TO PK STOCK AND PLACED IN 1	UTP-PET EP-0417E-1 CASE OF THE UNIT AFTEI E COALD BE ARRIVED AT	AS CONDUCTED FOR CONT. AS CONDUCTED SATISFAC	UTP-PET E7-04168-1 IMMERSICH, PARA-4-8-E. OPEN PRIMARY WINDING	
DIFFICULTIES REVIEW-A	TEST/REPORT HUMBER FAILED COMPONENT NAME	WANCE, DESIGN EMEINEERING, AND PROJECT OFFICE. TEST CONJUCTED WAS CONSIDERED A SPECIAL PET AND NOT REPRESENTATIVE F A LOT. REF. CTCTH ON TEST REGUEST 88-3145 ON 11-8-83.	69C-2014 Transformer	FAILURE MODE-OUT OF TOLERANCE, DURING INSERT STRENGTH TEST, ONE TEST SPECIFEM MAD INSERT NO. E PULLED OUT MITH A BE VEW INCH POUND FORCE APPLIED. THE INSERT SHOULD A MINIMUM OF 8.7 INCH POUNDS. CORRECTIVE ACTION-THREE ADDITIONAL UNITS NERE DRAWN FROM STOCK AND PLACED IN SPECIAL PET TESTING TO ESTABLISH A CON FIDENCE LEVEL FOR PARTS BY SABLECTING THEN THE MAD SHOWERLOAD, AND INSERT TOROUGHM TESTS, PPT TO	SEC-ES14 TRANSFORMER	FAILURE MODE-OUT OF TOLERANCE, DURING DIELECTRIC STRENGTH TEST ON WINDING 1-2 TO RETAL PLATE, THE OUT PUT VOLIAGE J UNPED ABRUPLY AFTER REACHING 300V RHS. THERE SHOULD BE NO BREAKDOMH AT 436 V SHY, ALSO MINDING-TO-WINDING RESISTANC E MAS DALY 330 K OMHS. THIS WAS CAUSED BY A HIGH VOLTAGE LEAKAGE PATH DUE TO POIN WORKMANSHIP, FABRICATION TECHNIQUE S, AND GC. CORRECTIVE ACTION-THREE ADDITIONAL UNITS WERE DRAWN FROM STOCK AND PLACED IN SPECIAL PET TESTING TO ESTABLISM A COM FIDENCE LEVEL FOR PARTS BY SUBJECTING THEN TO THERMAL SHOCK, IMPERSION, OWERLOND, AND INSERT TORGUEING TESTS. PPT TO	BE RETERIED WITH SEVEN NEW NAMPLES. RET. FR-654-E-DOS AND SUPPLEMENT A. UTO-1LOT-SQUARE-A/B ET-P-3031 REACTOR-TRANSFORMER TYPE EP-0417E-1 ACTOS FAILURE MODE-STRUCTURAL, A DWALL BUBBLE APPEARED ON THE CASE OF THE UNIT AFTER OYERLOAD TEST, PARA. 4.8.E.E. DURING INSERTS, NO CAUSE FOR THE BUBBLE COULD BE ARRIVED AT. AND NO DETRINENTAL EFFECTS COULD BE MOTED. IT MAS AGREED THAT THE BUBBLE PROBABLY WAS EMITTED FROM, THE PLASTIC BOBSIN.	CORRECTIVE ACTION—A MODIFIED PET TEST ON A SECOND UNIT MAS CONDUCTED FOR CONFIDENCE AND DISPOSITION OF THE LOT, THE MODIFIED PEY TEST CONSISTING OF IMMERSION AND OVERLOAD WAS CONDUCTED SATISFACTORILY AND THE LOT MAS ACCEPTED, REF. R-854-R-037.	E73034 TRANSFORMER E7-04100-1 65/C YES A.C. EL IMEE FMASE TRANSFORMER E7-04100-1 AC CS ACSASS URAL. DURING OVERLOAD TEST FOLLOMING IMMERSION, PARA-4-8-E.E. TEST SPECIMEN CASE CRACKED. TESTS MENE PENFORMED AND SPECIMEN HAD OPEN PRIMARY WINDINGS. CAUSE OF FAILURE IS UNKNOWN.	
****	Villere en	URANCE, DESIGN ENGINEERING F A LOT, REF. CTCTH ON TES	AUTOFILOT-BELARE-A/B	FAILURE MODE-OUT OF TOLER WEN INCH POUND FORCE APPLIT CORRECTIVE ACTION-THREE A FIDENCE LEVEL FOR PARTS BY	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLER UNFED ABRUPTLY AFTER REACH E MAS ORLY 330 K OFHS, THI S, AND GC. CORRECTIVE ACTION-THREE A FIDENCE LEVEL FOR PARTS BY	BE RETESTED MITH SEVEN NE AUTOFILOT-SQUARE-A/B FAILIRE MODE-STRUCTURAL. INGERSION TEST. NO CAUSE NOTED. IT MAS AGREED THAT	CORRECTIVE ACTION-A MODIF MODIF MODIFE CONSIST FR-654-R-037.	AUTOFILOT-SQUARE-A/B FAILURE MODE-STRUCTURAL. TRIC AMD CONTINUITY TESTS	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-SIRBORNE

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E ACTION, VEN BE DROPPED AS	A.C. ELECTRO CB. 3704 CINEN SHONED I D TEST, WHICH RE REMAINING	CASE SPLIT OF CASE SPLIT OF TTH P/N E7-O4	TELURE MAS COMPINE TILURE MAS COMPINNE TON OF ALL ACCELER VES TRANSCNIC NO TASGES NO TASGES THE UNITS. 1958-1-001 ON 0-6-6
A CORRECTIVA	OF THE SPE OF THE SPE THE OVERLOA JT 7HE ENTE RY 1864.	ATERAL CRA LY AND THE REPLACED WICES WITH T	PLIED. FAILU D INSPECTION CO/C YES ED EVIDENCE H FOUR OF IN
A AND PERFORM N. VENDOR RE	630829 66 810E COATING THAT AFTER CUR THROUGHON ED 13 FEBRUAI	630624 66 F SEVEN HAD (RTED INTERNAL HSFCRHER WAS E TO BE REPLA	ASOTOT FASTORY WITH WAS APPRILED HOUSING. BOUGH SHOWED ON WASTORY CONTRACTORY
ED TO MAKE AMALYBI ENGINEERING DEBIG ALL P.O.B AND REMO	UTP-PET RT-04165-3 AL SHOCK TEST, OUT IS UNKNOWN. IS UNKNOWN. COMDITION REVEALED ENT AID DID NOT OC I-631-10-23-4, DAT	UTP-GUAL/PPT ET-04395-5 T SPECIMENNS OUT O B HAD HIMDINGS BHO B HAD HIMDINGS BHO RHE ET-04395-3 TRA OR INSTALLATION AR	FAR 27-04099-1 WEN ZB VOC TEST 1 BELF-CHECK STAENO NTS. UTP-QUAL/PPT E7-04196-1 E7-04196-1 ESULT OF THE INMER ESULT OF THE INMER
REJECTED TO VENDOR, VENDOR REQUESTE 1-0-01 BUT WAS DISAPPROVED BY GO/C OF THIS PART NO. NO/C BUYER PULLED AS-E-036.	E7-E840 THANSFORMER BURING PET OF LOT 144, AFTER THERMA SIDE OPPOSITE THE TERMINALS. CAUSE I E. CONTINUED. AN EVALUATION OF THIS OF TEST, THE BULGE MAS NO LOWGER EVIDE ER, 144, TAS ACCEPTED. REF. NENO ETI	49C-1763-3 TRANSFORER AFTER THERMAL SHOCK TEST, FOUR TEST ERLCAD TEST, TAO OF THESE FOUR UNITY TOPPED, PER CIC D7452, WAP HOSO434 TOPPED, PER CIC D7452, WAP HOSO434 TOPPED IN THE K AND F SERIES HISSILES.	FAILURE HODE-OUT OF TOLERANCE TEATMANSFORMER PT-04090-1 435707 NO 10889E FAILURE HODE-OUT OF TOLERANCE. ACCELEROMETER HAD NO CUTPUT WHEN ED NO TEST INPUT WAS APPLIED. FAILURE WAS COMPINE DUE TO MIRALIGNED DIPTERENTIAL TRANSFORMER BLUE WITHIN THE BELF-CHECK SYLENGID HOUSING. COKECTIVE ACTION-VENDOR INITIATED DESIGN IMPROVEMENT OF BELF-TEST SOLENGID AND INCREASED INSPECTION OF ALL ACCELER TO HIGHLOT-SQUARE AGAINST FAILURE CAUSED BY STICKING COMPONENTS. FAILURE MODE-STRUCTURAL. AFTER COMPLETION OF THERMAL SHOCK TEST, SIX TEST SPECIMENS SHOWED EVIDENCE OF CRACKING IN TARRING DEGREES ON THE OUTER CASE. CRACKING INCREASED AS A RESULT OF THE INMERSION TEST ON FOUR OF THE UNITS. CORRECTIVE ACTION-VENDOR SUBHITTED SATISFACTORY CORRECTIVE ACTION WAS APPROVED ON VAF 27-04358-1-001 ON 8-6-8
SUG-STREET CORRECTIVE ACTION-LOT EL INTITATED VAF ET-04168-1 SECOND SOURCE SUPPLIER FO	TURAL.	FAILURE MODE-STRUCTURAL, I DE CASE, DURING THE ONI I DURING THE TEST, CORRECTIVE ACTION-TEST SI CORRECTIVE ACTION-TEST SI	AUTOFILOT-SQUARE-A/B FAILURE HODE-OUT OF TOLES B DIE TO HEALIGHED BIFTED COKFECTIVE ACTION-VENDOR ONCTERS TO INSURE AGAINST AUTOFILOT-SQUARE-A/B FAILURE HODE-STRUCTURAL. VARTING DEGRÉES ON THE OUT CORRECTIVE ACTION-VENDOR
	TAILED CONTORNEY AND THE TAIL TO THE TAIL TO THE THE THE TAIL THE		LOT EL REJECTED TO VENDOR. VENDOR REQUESTED TO MAKE ANALYSIS AND PERFORM CORRECTIVE ACTION. VENDO ASSET REJECTED TO VENDOR. VENDOR REQUESTED TO SE DROPPED AS A ALLIER FOR THIS PART NO. 40.7 SULED ALL P.O.8 AND RENOVED VENDOR REQUESTED TO SE DROPPED AS A LIER FOR THIS PART NO. 40.7 SULED ALL P.O.8 AND RENOVED VENDOR REQUESTED TO SE DROPPED AS A LIER FOR THIS PART NO. 40.7 SULED ALL FOR THIS PART NO. 40.7 SULED AS A C. ELECTRONI PRACTICE OF THE SPECIFIC NO. 4.8 ACC. ELECTRONI PROCESSITE THE TERMINALS. CAUSE IS UNKNOWN. TESTING CONTINUED. AN EVALUATION OF THIS CONDITION REVEALED THAT AFTER THE OVERLOAD TEST, WHICH F SHOCK YEST, THE SULEC WAS NO LOWES EVIDENT AND DID NOT OCCUR THROUGHOUT THE ENTIRE REMAINING TEST MADERS. 144, AS A ACCEPTED. REF. MED. OF THIS CONDITION SEVENALED THE OVERLOAD THE SERIAL PROCESSITE THE OVERLOAD THE SERIAL FOR THE SERIAL THROUGHOUT THE ENTIRE REMAINING TEST TRANSFORMER. 144, AS A ACCEPTED. REF. MED. SEVENAL SPORE AND HOLES IT TRANSFORMER. 144, AS A ACCEPTED. REF. MED. SEVENAL PROCESSITE THE OFFICE WITH PART PLANSFORMER. 1844, AS A ACCEPTED. OF THESE FOUR UNITS HAD MINDINGS SHORTED INTERNALLY AND THE CARES SPLIT OFF TRANSFORMER HAS REPLACED WITH FULL WALLIFF THE SECURIC PART OF THE

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BYSTEN BUB-BYBTEN	TEST/REPORT NUMBER DIF DATA SOURCE V	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	\$17E	9 P. E.	VEHICLE BITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	
TEST MAS STOPPED AND P.	3, TEST MAS STOPPED AND PUN IS CONSIDERED ADEQUATE FOR PLIGHT ON LV-3-C AND OTHER LV-3 BOOSTERS. PPT QUALIFICATION TESTING MILL BE SCHEDULED FOR COMPLETION PRIOR TO FIRST PLIGHT OF SLV-3. REF. FR 854-E-008 AND SUPPLEMENT A.	T OF BLY-3. REF. FR	R LV-3 BO	AND BUP		UALIFICATION T	*****
AUTOFILOT - SAUARE - A/B	69AD091~3 Transformer	UT#-PET ET-04184-1	650401	5/93	2 6	YES APPLIED COMPON NO ENTS	******
FAILURE HODE-OFEM-ELECT, DURING WINDING CONTI BOCCINCNS BHONED ONE OPEN SECONDARY WINDING IN I LAB WITH THE VENDORS COUNTRANCE AND COOPERAT S PROBABLY A RESULT OF THE FABRICATION HETMOD.	FAILURE MODE-OPEN-ELECT. DURING WINDING CONTINUITY CHECK AFTER COMPLETION OF OVERLOAD TRIT, PARA, 4,7,14, THO TEST SPECINCUS SHOOKED ONE OPEN SECONDARY WINDING IN EACH TRANSFORMER, FAILURE ANALYSIS CONDUCTED IN THE MAGNETIC COMPONENT LAB WITH THE NEEDENTED IN THE MAGNETIC COMPONENT LAB WITH THE NEEDENT OF THE FABRICATION HETHOD. ** PROBABLY A RESULT OF THE FABRICATION HETHOD.	TER COMPLETION OF ON HER. FAILURE MAS DL. THAT FAILURE MAS DL	ERLOAD TES B COMBUCTI E TO INTES	NY, PARA. ID IN THE	4 1 2 3	4,7,14, TWO TEST MACMETIC COMPOSEN BREAKAGE WHICH WA	
CORRECTIVE ACTION-THE VER TON INCORPORATED SLOTTED F ESIÉM APPROVED THE VENDOR	CORRECTIVE ACTION—THE VENDOR WAS CONTRACTED AND HAB BUDMITTED COURECTIVE ACTION ON VAF ET-DAISM—1-VCP-001. THIS ACT ON INCORPORATED SLOTTED HOLES ON THE FACE PLATE SO THAT NO STRAIN IS INFOGED ON THE WIRES DUNING THERMAL TENTING. D SIGH AFFROVED THE VENDOR ACTION PROPOSAL AND BIX NEW UNITS WILL BE TESTED. REF. VR—854—2-008.	ED CORRECTIVE ACTION STRAIN IS IMPOGED ON WILL BE TESTED. REF.	ON VAF E	7-04184-1 5 DUNING -009-	1 KG	-001. THIS ACT MAL TENTING. D	
AUTOFILOT SQUARE-A/B	69C1787-3 TRANSFORMER	UTP-GUAL/PPT 27-D4396-1	6303ES (5/9 5	. Q	YES TRANSONIC NO TS-3021	•••
FAILURE MODE-STRUCTURAL. DURI M A SMALL HOLE IN THE POTTING.	FAILURE MODE-STRUCTURAL, DURING BEALING TEST, PARA, 4.3, THE TEST SPECIMEN MAD A CONTINUOUS FLOW OF AIR BURBLES FRO I A SMALL MOLE IN THE POTTING.	E TEST SPECIMEN HAD	A CONTINUE	ous FLOR	8	IR BUEBLES FRO	
CORRECTIVE ACTION-VEHIOR-	SLOWITTED SATISFACTORY CORRECTIVE ACTION WHICH WAS APPROVED ON UMF 27-04396/1-0-001 ON 6-6 F-3002 BT AND FR-654-2-009-A.	ACTION WHICH WAS APP	ROVED ON	MF 27-04	966	9-9 NO 100-0-1	
AUTOPILOT - SQUARE - A/B	FR 69C4063.1 CHCKE-TRANSFORNER TYPE	UTP-QUAL/PPT 27-04166-1	6303 7.2	y / 3	ğ Q	NO ENTS INC	******
FAILURE MODE-OUT OF TOLER INSERTS MEE E. SSING FROM F TOLERANCES.	FAILURE MODE-OUT OF TOLERANCE, DURING VISUAL INSPECTION TESTING, PARA, 4.1, THE RAISED FORTION (BUTTON) AROUGO THE TASERS MUSE F. 1811 NG FROM THO AMECINENS AND PELL OFF THE OTHER SPECINENS DURING HANDLING, CREATING DINCHSIGNAL OUT OF FOLERANCES.	TING, PARA, 4.1, THE EN SPECINENS DURING	RAISED FC HANDLING,	CREATING	. 9 I	4-1, THE RAISED PORTION GUTTON, ANOLED THE LEDWING HANDLING, CREATING DIMENSIONAL OUT O	
COBRECTIVE ACTION-THE VEN BITGATION AS TO THE EXACT 3-DOG.	CORRECTIVE ACTION-THE VENDOR WAS CONTACTED ABOUT THE PROBLEH AND M.S TO REFLY IN URITING, THE RESULTS OF THEIR TIGATION AS TO THE EXACT CAURE AND THEIR CORRECTIVE ACTION TO BE TAKEN TO PREVENT A RECURRENCE. REF. CTCTH NO. -DOG.	H AND M.S TO REFLY IN WRITING, THE RESULTS OF THEIR INVE TO BE TAKEN TO PREVENT A RECURRENCE, REF. CTCTH NO. 5:40-	H VRITING HT A RECL	THE RES	E	OF THEIR THVE CICIH NO. 874-	
AUTOPLLOT-BOUARE-A/B	MSE-49/A3-4DE-DD-176	FLIGHT	430131	A3/478	# Q		
FAILURE MODE-OUT OF EXPLO PS AND DEVERGED SLIGHTLY U	I OF EXPLCTED TEST VALUE, A SUSTAINER PITCH OSCILLATION BESAN AT 137 BECONDS AT A FRESUENCY OF 1.0 LIGHTLY UNTIL SUSTAINER CUTOFF, WHEN THE FRESUENCY REACHED 1.8 CP3.	OSCILLATION BEGAN AT EQUENCY REACHED 1.6	137 BECO	A 7 A 60	FREG	UENCY OF 1.0 C	
SYSTEM EFFECT-ERRATIC OPE ND PEAK TO PEAK, WITH CORN NAS 4.7 DEGREES PER SECON	RATIC OFERATION, DURING THE PERIOD OF OSCILLATIONS THE NAXIMUM FITCH RATE WAS 0.33 DEGREES FER SECONTH CORRESPONDING SUSTAINER EHGINE MOTION OF 1.85 DEGREES FEAR TO FEAR, ROLL COUPLING MAXIMUM RATE PER SECOND FEAR TO FEAR HITH VERHIER ENGINE MOTION OF 8.8 DEGREES FER SECOND.	LATIONS THE MAXIMUM OF 1.55 DEGREEN PEAK HOTION OF 8.8 DESRE	PETCH RATE TO PEAK.	MAS 0.3	E OF	FREES PER SECO B PANIHUM RATE	

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		DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	¥		•			
l 1	STSTEM	TEST/REPORT HUBER FAILED CONPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	E O	VENDOR NAME VENDOR PART NO		
	WENICLE EFFECT-NOME.							7676	
1 4	AUTOFILOT-BQUARE-A/B	AOL CE-0031 /L1-401-00-120	FLIGHT	1280	PALC1-1	£ 5		••1407	
27	FAILURE MODE-OUT OF EXPEC EN STACE AT FREQUENCIES BI AGENA STAGES LOMERING THE	ITED TEST VALUE. YAW RATE TYEEN 2.73 AND 3.08 CPS. PREQUENCY OF THE VEHICLE	GYRO SIGNALS LARGER THAN EXPECTED (0.38 DEG/SEC P-P) DURING BOOST THE LARGE SIGNALS HAVE BEEN ATTRIBUTED TO THE LONGER AND HEAVIER FIRST BENDING MODE AND SHIFTING FORMARD THE FIRST MODE ANTI-MODE.	ECTED (D.34 ATTRIBUTED ING FORWARE	DEG/SE(TO THE L	-4-4-0. -0.00 -0.0	(0.38 DEG/SEC P-P) DURING BOOST UTED TO THE LONGER AND HEAVIER RHARD THE FIRST MODE ANTI-MODE.		
	SYSTEM EFFECT-ERRATIC OPERATION.	PERATION.							
	VEHICLE EFFECT-LOSS OF W	VEHICLE EFFECT-LOSS OF VEHICLE STABILITY. THE LOMER FREQUENCY OF THE FIRST MODE AND THE FORMARD SHIFT OF THE ANTI-H Des. Caused deterioration of the First mode autopilot stability.	LUENCY OF THE FIRST HOUSELITY.	E AND THE !	ORWARD	113	OF THE ANTI-M		
	CORRECTIVE ACTION-START RON STATION 675 TC STATE	CORRECTIVE ACTION-STARTING WITH 201D, AND CONTINUING THROUGH THE 208 AND SLV-3 PROGRAMS, THE GYROS WERE RELOCATED F ROM STATION 675 TC STATION 521, AND FINALLY TO STATION 475.	KOUGH THE EDS AND SLV-?	PROGRAMS.	THE GYRK	P R	RE RELOCATED F		
<u> </u>	AUTOFILOT - SQUARE - A/B	A-A9-04-5466-F SWITCH 6-DIODE	FAR 27-41000-631	107F 1	FACTORY	7 G 8 O	YES TRANSITRON NO	694434	
	FAILURE MODE-FAIL TO OPED EXPECTED. FAILURE TRACED PROUT BOARD PVN E7-41365-484TCH 6 TO FAIL. CR-E 18	FAILURE MODE-FAIL TO OPESATE AT PREDCRIBED THEE. THE DERVOAM-LIFIER FAILED TO CHANCE INTEGRATOR GAIN AT STAGING AS EXPECTED. FAILURE TRACED TO FAULTY SHITCH G. FAILURE OF SMITCHG WAS CAUSED BY A LEAKY ZENER DIODE CR-R MOUNTED ON CI RCUIT BOARD P/N E7-41365-805.DC LEAKACE CURRENT OF ED MICHOAMPS OCCURRED. A LEAKACE OF ONLY 13 MICHOAMPS WILL CAUSE SMITCH 6 TO FAIL, CR-Z 13 A TRANSITRON SVIS A COMMERCIAL TYPE.	IVOAM-LIFIER FAILED TO MITCHE MAS CAUSED BY A DROWN'S OCCURRED. A LETYPE.	CHANGE INTI I LEAKY ZEHE IKAGE OF ONI	CERATOR OF DIODE	CR-R	ATOR GAIN AT STAGING AS DIODE CR-R MOUNTED ON CI	·	
	CORRECTIVE ACTION-BECAU CADUCTOR DEVICES IN CRITY Y SENICONDUCTOR DEVICES.	SE PROCURING SPECS DID NOT ICAL CIRCUIT APPLICATIONS.	RESTRICT LEAKAGE CURRENT GO. THIS DOCUMENT COVERS THE GEI	C ISSUED A	NEW SPEC	- 8 - 8	GD/C 188UED A NEW SPEC 0-79067 FOR SENIC GENERAL REQUIREMENTS FOR HIGH RELIABILIT		
<	AUTOFILOT-SQURE-A/B	DA794/02-640-13-13 AUTOPILOT	CONFOST TE-FRD/DFL	13F 620920		¥ O		887398	
	FAILURE MODE-FAIL DURING	G OPERATION.							
	SYSTEM EFFECT-OFERATION	I STOPS PREMATURELY. FAILED AT END OF COMMIT PRIOR TO ENGINE START.	OF COMMIT PRIOR TO E	HOINE START					
	VEHICLE EFFECT-NONE.								
	CORRECTIVE ACTION-UNKNOW							 -	
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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORME

8787EW 808-8787EW	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	\$17E	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	A-99-04-3413-F RESISTOR ASSEMBLY	FAR 7-41874-5	620713	FACTORY	7E8 60/C	
FAILURE MODE-OUT OF TOLERA NO 473.	ANCE. OUT OF TOLERANCE CONDITION WAS REPORTED FOR TWO RESISTOR ASSEMBLIES SERIAL NO. 472	AS REPORTED FOR THO	REBIBTOR	198676 LT	18 BERIAL MO. 472 A	
CORRECTIVE ACTION-SUPERVISION IS WA	CORRECTIVE ACTION-SUFERVISION IS MAINTAINING CLOSER SURVEILLANCE IN RECEIVING INSPECTION AND MANUFACTURING AREAS. F ILURE NOT CONFIRMED FOR SERIAL NO. 473.	ANCE IN RECEIVING	INSPECTION	AND HAH	FACTURING AREAS. I	-i
AUTOPILOT-SQUARE-A/B	A-9L-04-3373F RATE GYRO HICROSYN POTENTIONETER	FAR E7-4100E-655	39F 620623	LINCOLN	7ES 10	78.
FAILURE MODE-FAIL DURING O ING FAULTY ROLL-RATE GYRO. NE TYPE OF FAILURE OCCURRED	OPERATION. NO-GOS WERE RECEIVED ON MAPCHE CARDS 327, 328, 347 AND 348 (27-96451-5) INDICAT , THE GYRO MAS DISASSEMBLED AND A BROKEN WINDING IN THE SIGNAL GENERATOR WAS DISCOVERED. SA D ON FAR A-AL-O4-3370F.	MAPCHE CARDS 327,	128, 347 AI [81CHAL G	D 348 U	(E7-96451-5) INDICAT R MAS DISCOVERED. SA	····
CORRECTIVE ACTION-VENDOR	CORRECTIVE ACTION-VENDOR HAS INCREASED BUALITY CONTROL PROC	PROCEDURES.				
AUTOPILOT-SQUARE-A/B	DAS67 CONNECTOR	COMPOSITE-FRD/DPL	1100 620402	1-E	7E8 153	006555
FAILURE MODE-OUT OF TOLERA	ANCE ENGINES FAILED TO MULL IN PITCH PLANE-INVESTIGATION REVEALED A FAULTY RECEPTICAL IN U	H PLANE-INVESTIGAT	ION REVEAL	D A FAU	TY RECEPTICAL IN	
SYSTEM EFFECT-ERRATIC OFE	SYSTEM EFFECT-ERRATIC OPERATION EMGINES FAILED TO MALL IN PITCH PLANE RESULTING IN NO-GO LOOP TEST.	ITCH PLANE RESULTIN	3-ON NI (1600 TE	11.	
VEHICLE EFFECT-COMPOSITE DELAYED.	DELLAYED.					
CORRECTIVE ACTION-PITCH NULLING SIGNAL REROUTED.	ULLING SIGNAL REROUTED.					
AUTOFILOT-SQUARE-A/B	AA&&-0041/P6-4CO-02-F1	COMPOSITE-J FACT	104D 620302	ETR	YES YES	692259
FAILURE HODE-OUT OF SPECIF W/ROLL DATA. THIS WAS ALSO	FAILUNE MODE-OUT OF SPECIFICATION OR TOLERANCE. TELEMETERED DATA INDICATED A R. PERCENT IBM OSCILLATION IN THE BI TA VROLL DATA. THIS MAS ALSO OBSERVED ON TEST PG-4CO-01-F1 (REF. AA&E-0040).	DATA INDICATED A 2	PERCENT 11	3M 08C1L	LATION IN THE BL Y	
SYSTEM EFFECT-INPROVER ANA	ALOG BIGHALS.					
VEHICLE EFFECT-NONE.					·	
CORRECTIVE ACTION-UNKNOWN.						
						1
					0.00	— <u> </u>
					TIO JAKA	

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FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE-VERNIER NO. 2 YAW BIAS MAS B.O VOC.S.SAVOC WAS EXPECTED.

VEHICLE EPPECT-COUNTDOMM, COMPOSITE DELAYED OR RESCHEDULED. POST COMPOSITE TESTING MAS REQUIRED.

SYSTEM EFFECT-CPERATION 700 LOW-

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BYSTEM BUB-BYBTEM	TEST/REPORT MANGER FAILED COMPONENT NAME	DIF DATA SOURCE PART MUNDER	VEHICLE BITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	VENDOR NAME ENDOR PART NO	
CORRECTIVE ACTION-	, kade de la composition de la composi				C-18327
AUTOFILOT-SQUALE-A/B PLATFORM AND CONTROL	C1-3MO-01-48	COMPOST TE-PRD/DPL	640304 C VE&	•	57790
FAILURE MODE-FAIL DURING	DURING CREMATION. THE AZIMUTH GYRO IN M.S.S. PAILED DURING DRIFT TEST DUE TO BHORT IN UMBILICAL &	b.a. FAILED DURING D	MIFT TEST DUE TO MICHT IN I	UBILICAL .	
STATEN EFFECT-OPERATION C	ATION DOES NOT START.			Marin Turk wa	
WENTELE EFFECT-COMPOSITE DELAYED.	DELAYED.				
CORRECTIVE ACTION-REPLACE UMILICAL.	r umiticat.				
AU.OFILOT-SAUMIE-A/B	84.V-89-04-5117 PROGRAMMER-3#TTCM	FAR 69-42001-697	8404£7 FACTORY YES 40./C		880478
FAILURE MODE-FAIL DURING D FAILURE OF THE PROGRAPH THE MARNESS TRAY RESULTING	FAILURE MORE-FAIL DURING OPERATION. UNIT WAS REJECTED UNEN DURING PAT VISRATION SMITCH 4 MALFUNCTIONED. THE REPORTE O FAILURE OF THE PROGRAMMER WAS HOT CONFISHAD. HOMEVER, THE HOST PROGRADLE CAUSE OF THE FAILURE WAS CONTANIANTION IN THE MARNESS TRAY RESULTING IN AN INTERHITTENT CONNECTION DURING VIBRATION.	DURING PAT VIBRATIC HOST PROBABLE CAUSE RING YBRATION.	DI BALTCH 4 MALPUNCTIONED. " ; OF THE PAILURE WAS CONTANT	THE REPORTE	
CORRECTIVE ACTION-FACTORY INSPECTION AL AMARE OF THE RESILES OF THIS AMALTSIS.	ACTORY INSPECTION AND PRODUCTION PERSONNEL WITNESSED THE EXAMINATION OF	ACL WITHERSED THE ET	CHINATION OF THE HARNESS TRAY AND ARE	RAY AND ARE	
AUTOFILOT - SBUNK - A/R PROGRAMMER	N.V-90-04-5122 PPOGRAMER-TRANSIBTOR	FAR 55-41001-699	MADARY FACTORY YES 60/C		************
FAILURE WOOK-FAIL DIWING 32 SECONGS, FAILURE WAS ECTOR-BASE BHONT CIRCUIT	FAILURE WOME-FAIL DURING CHERATION-PROGRAMMER MAS REJECTED DURING PAT WHEN THE CLOCK APPEARED TO STOP RUMNING AFTER 32 SECONCIS, FAILURE WAS TRACED TO A FAULTY TRANSISTER 6-84 ON CIRCUIT BOARD 69-41102-801. THE TRANSISTOR HAD A COLL ECTOR-BASE SHORT CIRCUIT CAUSED BY EXCESSIVE CURRENT DRAIN. CAUSE OF THE EXCESSIVE CURRENT COULD HOT BE FOUND.	DURING PAY WHEN YNG ON CIRCUIT BOARD 61 CAUSE OF THE EXCESS	DURING PAT WHEN THE CLOCK APPEARED TO STOP RUMNING AFTER ON CIRCUIT BOARD 89-41102-801. THE TRANSISTOR MAD A COLL CAUSE OF THE EXCESSIVE CURRENT COULD NOT BE FOUND.	MAINE AFTER HAD A COLL CUMD.	
CORRECTIVE ACTION-PRODUC	CORRECTIVE ACTION-PRODUCTION AND INSPECTION PERSONNEL MERE INFORMED OF THE RESULTS OF THIS AVALTSIS.	INFORMED OF THE RES	HATS OF THIS PARLYSIS.		
AUTOFILOT SQUARE-A/B	CT-88-04-283 AUTOPILOT PROGRAMMER	FAR 89-41001-609	840424 ETR TES 6D/C	U	
FAILURE HODE-FAILED TO CH	TO OPERATE AT PRESCRIBED TIME, CAUSED BY PRETRISSECRIME VOLTABLES, BETTIMS TIME CLOCKS OUT OF SCH	BY PACTRIGGERING VOL	TABES, SETTING TIME CLOCKS	OUT OF SCH	
CORRECTIVE ACTION-RECOMM	CORPECTIVE ACTION-RECOMMEND REDIESION OF GROUND SUPPORT EQUIPMENT, PROGRAMMER HERE! CIRCUITRY, MODIFY 65E LOSIC AND	IPMENT, PROGRAMMER I	HEACT CIRCUITAY, MODIFY 656	CONIC AND	
		All the second section of the second section of the second section of the second section of the second section		746E 01E1	

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	18 204 1866	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	OFILOT STATEM-AIRBORI	*			
	3787EH \$18-8787EH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART HUMBER	VEHICLE SITE DATE DIF TIME DIF	# 5 8 6	VENDOR MANE	r1
	REMOVE UNUSED HIGH POMER S	SMITCHES IN PROGRAMMER.					*****
	AUTOFILOT-BRUNE-A/B	3LV-88-04-5109 Proceamerr	FAR 69-4£001-697	BADARA FACTORY	7 YES 50/C	3/0 5	******
	FAILURE MODE-ERRATIC OPER REPORTED FAILURE OF THE P RATIC SOCRET. THE MOST PRO	PAILURE MODE-ERRATIC OPERATION-MAIT WAS RELECTED WHEN A TRANSIENT CONDITION ON THE PITCH SIGNAL LINE MAS NOTED. THE REPORTED FALLURE OF THE PROGRAMMER NARMESS TRAT REVEALED AN ER ALIC SOCRET. THE MOST PROGRAMMER TRAY SOCRET.	ANSIENT CONDITION ON VER TESTING OF THE PR RE IS THE CONTANIMATE	THE PITCH BIGHE CGRANGER NARNES D HARNESS TRAY	S TRAT BOCKET.	MAS NOTED. THE REVEALED AN EN	
	CORRECTIVE ACTION-PACTORY	CORRECTIVE ACTION-PACTORY INSPECTION AND PRODUCTION PERSONNEL NERE INFORMED OF THE RESULTS OF THIS ANALYSIS.	EL VERE SWORKED OF	THE RESULTS OF	THIS AM	12.7818.	······································
	AUTOPILOT - SAUARE-A/B	3L*=98-04-3111 PROGRAPHER	FAR 69-42001-717	960419 ETR	YES 60/C	9/C	*
	FAILURE MODE-ERRATIC OPER 8 HOYED AND THE WERNIER EN F. FOR THE REPORTED FAILURE	FAILUNG MODE-ERRATIC OPCRATION. THE PROGRAMMER WAS REJECTED WHEN DURING VERHIER ENGINE EXERCINE, THE BOOSTER ENGINE S MOYED AND THE WENHIER ENGINES STOPPED MONING. THE REPORTED FAILURE OF THE PROGRAMMER WAS MOT CONTINUED AND NO CAUS F. FOR THE REPORTED FAILURE WAS FOUND IN THE PROGRAMMER EVEN AFTER EXTENSIVE TESTING.) when during vernier eng) Failure of the programm After extensive testing.	ENGINE EXERCIS RAMMER MAS NOT ING.	E, THE I	NODSTER ENGINE	
	CORRECTIVE ACTION-NO CORRI	CORRECTIVE ACTION-NO CORRECTIVE ACTION CAM BE TAACH BECAUSE THE FAILUME REPORTED WAS NOT CONFIRMED.	. THE FAILUME REPORTE	D WAS NOT COMFI	RHED.		
	AUTOFILOT-SEUMKE-A/B PROGRAMMER	PLV-89-74-3106 PROGRAMER-CAPACITOR	FAR 69-42001-697	SEDATS FACTORY	2 8	9/09	*****
	FAILURE MODE-FAIL DURING C CHANGED STATE, THE A-8 MCDI ACROSS TERMINALS & AND 1D 8	DURING OPERATION. PROGRAMMER NAS REJECTED WHEN BWITCH ? CHANGED STATE AT THE SAME TING BUSTCH 13. A-8 MCDIALE NAS OBSERVED TO BE CONTAMINATED WITH A LIRUID LALKYD WEMICLE! AND CAPACITOR C-2 WIRED AND 10 RATHER THAN ACROSS TERMINALS 7-8 OF THE RELAY.	WHEN BUITCH ? CHANG O WITH A LIBUID (ALK F YHE RELAY.	CD STATE AT THE FD VEHICLE) AND	SAME TE	SAME TIME SMITCH 11 CAPACITOR C-E WIRED	
	CORRECTIVE ACTION-FACTORY UID CONTAININATION IS UNDER	CORRECTIVE ACTION-FACTORY INSPECTION AND PRODUCTION PERSONNEL NERE INFORMED OF		THIS ANALYSIS. THE SOURCE OF THE	THE SOUR	CE OF THE LIA	
•	AUTOPILOT-SQUARE-A/B	SLV-98-C4-511D PROGRAMER-ABAE CIRCUIT BOARD	FAR 69-42001-727	SEGSUS FACTORY	ž 8	J/93	
	FAILURE MODE-EPRATIC OPERA A TRAMSISTOR 0-4 (20057) M- OME TO THE MEADER WHEN THE	FAILUNE MODE-EPRATIC OPERATION. UNIT WAS REJECTED FOR ERRATIC OPERATION OF SWITCHES & AND 7. FAILUNE WAS TRACED TO A TRANSISTOR 8-4 (20067) WICH MAD AN INTERNITIANT BHORT OF BASE LEAD TO HEADER. THE BASE LEAD NAD BEEN MOVED TOO CL OSE TO THE MEADER WHEN THE TRANSISTOR HAD BEEN DEPORMED DURING NAMIFIACTURE OF THE TRANSISTOR.	IC OPERATION OF BAILT BASE LEAD TO HEADER. NG NAMUFACTURE OF TH	HES 6 AND 7. F. THE BASE LEAD I TRANSISTOR.	AD BEEN	NA TRACED TO	
	CORRECTIVE ACTION-RECEIVIN	RECEIVING-INSPECTION REQUESTED TO WONITOR LEAD PLACEMENT IN ALL TRANSISTORS. SEMENAL ELECTRIC MAS	LEAD PLACEMENT IN A	.L Thamsistons.	SE HERVI	ELECTRIC MA	

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1901 W/ 61	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	DPILOT SYSTEM-AIRBOR	¥				
SVSTEN SUS-SYSTEN	TESTARFORT MANGER FAILED CONFONENT MANG	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DATE DIP	817E	# 5 2 7	VENDOR MANE	·
ABVISED OF THIS AMALTI	ADVISED OF THIS AMALÍBIB IN RAR BLY-89-04-8065.						630464
AUTOPILOT-SQUARE-A/B PROGRAMMER	CT-98-04-272 AUTOFILOT PROGRAMMER	FAR 89-4100A-7	860404 F.	FACTORY	7.63 £37 04	3/0	***************************************
FAILURE MODE-FAIL TO O	TO OPERATE AT PRESCRIBED TIME. BWITCH 29 HAD NO OUTPUT. BUE TO IMPROPERLY CONSTRUCTED DIODE MATRI	MAB NO CUTPUT. BUE	10 INTIOPERI	. CO45	RECT	10 DECOC MATRE	
CORRECTIVE ACTION-RECO	CORRECTIVE ACTION-RECOMEND TISHTER FACTORY NAMERACTURING AND INSPECTION PROCEDURES.	IND INSPECTION PROCE	SURES.				
AUTOFILOT-SAUARE-A/B PROGRAMECR	SLV-99-04-5103 COUNTER CIPCUIT BOARD	FA3 60-41101-5	5303 640330	FACTORY	20	. 5/05	*****
FAILURE HODE-FAIL DURI BECOMD, FAILURE WAS TR	FAILURE HODE-FAIL DURING OPERATION. THE COLNTER CIRCUIT BOARD HAS REJECTED NHEW THE PROGRAMMER CLOCK STOPPED AT SECOND, FAILURE WAS TRACED TO SOLDER BETWEEN PINS E AND 7 OF BINARY IN-4.	IRD IAND REJECTED 144E) JF BINARY IN-4.	THE PROGRA	3	90. W	STOPPED AT 0.8	
CORRECTIVE ACTION-INSP ARY HODULES.	CORRECTIVE ACTION-INSPECTION PERSONNEL WERE REQUESTED TO EXERCISE HORE CARE IN POST-SOLDERING INSPECTION OF RY HOULES.	GRCIBE MONE CARE IN	FO8 T-80LDER	*	PECT	ION OF THE BIN	
AUTOFILOT - SAUARE-A/D	GDC/AGUS3-DD1-80/FC-CO-01-00/1-023 COMPOSITE-FACTORY PARER BUPPLY	COMPOSITE-FACTORY	7123 FA	FACTORY	33	5/09	916000
FAILUME MODE" ERRATIC GO CPS SIGNAL OF 0.EV	FAILUME MODE" ERRATIC OPERATION PITCH PROGRAM PROFILE"HIDMESTERN RECORDED NO.2 CHANNEL 18" DISPLAYED A BUPERINPOSED 80 CP8 316MAL OF 0.2V PEAK-TO-PEAK. THIS PROBLEN REBLITED FROM A PAULTY GROUND COMMECTION IN THE GROUND 400 CP8 BUP LY.	ISTERN RECORDED NO.E NOM A PAULTY SHOUND	COMECTION	DISPL IN THE	9	A BUPERTHPOSED O 400 CPS BUP	
AUTOPILOT-SAUARE-A/B	60C/A6U63-001-80/FC-CO-01-3071-023 COMPOSITE-FACTORY AMPLIFIER-BACKOUT-	COMPOSITE-FACTORY	71-E3 FA	FACTORY	22	3/ 9	
PAILURE MODE- OUT OF THE THE AME OF THE AMERIFIER.	F TOLERANCE, BUSTAINEN PITCH AXIS END-TO-END TORGUIMS GAINS WERE OUT OF TOLERANCE WITH AGE TORGU H Voltage applied to the Airborne Torguer Amplifier, Cause- Gain Change by the age Pitch Buckout	-END TORGUING GAINS R AMPLIFIER. CAUSE-	WERE OUT OF	TOLEN.	N A A	TOLERANCE WITH AGE TORSU BY THE AGE PITCH BUCKOUT	
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9961 MY 81	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORME	TOFILOT SYSTEM-AIRBON	¥				ſ
8787EH 816-8787EH	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	VEHICLE SITE DATE DIF TIME DIF	PR I	VENDOR NAME	
AUTOFILOT-BAUARE-A78	81.V-86-04-5105 PROGRAMMER-BMI TCM	FAR 68-4£001-6	94031	FACTORY	ž š	YES 60/C HO	*****
FAILURE MODE-ERRATIC OFF	FAILURE MODE-ERRATIC OPERATION, PROGRAMMER WAS REJECTED WHEN DUKING PAT VISRATICS TESTS SWITCH 5 CHAMGED STATE E within 5 millibecombs, the Pailure Reported was not confirmed and no cause por the Pailure Reported was Found.	HEN DUKING PAT VIBRAT IRNED AND NO CAUBE PO	104 7£878 # 1946 FA11	BWITCH S URE REPO	CHAN	GED STATE THIC MAS FOUND.	
CORRECTIVE ACTION-ND COR	CORRECTIVE ACTION TAKEN BECAUSE THE FAILURE WAS NOT CONFIRMED.	FAILURE WAS NOT CONFI	RMCO.				1
AUTOFILOT-SQUARE-A/B	SLV-88-04-3118 ROLL TRANSDUCER	FAR 87-83800-028	116099	PACTORY	<u> </u>	YES CRESCENT NO	***************************************
FAILURE HODE-OUT OF TOLERANCE, THO ROLL IN OF 3 DEGREES 18 CALLED OUT IN EOF 330 LTED FROM IMPROFER CHECKOUT PROCEDURES.	FAILURE MODE-OUT OF TOLERANCE. TWO BOLL TRANSDUCERS NERE REJECTED FOR A PMASE SMIFT OF MORE THAM S DEGREES A MAXIMU H OF 3 DEGREES IS CALLED OUT IN EOF 330.888 FAILURE AMALYSIS DID MOT COMFIRM REPORTED FAILURE. FAILURE MAY HAVE RESU LTED FHOR IMPROFER CHECKOUT PROCEDURES.	REJECTED FOR A PHASE IS DID NOT CONFIRM RE	MIFT OF P	CORE THAN	30 DE	GREES A MAXIMU MAY HAVE RESU	
CORRECTIVE ACTION-FAR BA	CORRECTIVE ACTION-FAR BLY-89-04-5118P COMERS CORRECTIVE ACTION CONCERNING PLASE BHIFT BEING GREATER THAN 3 DEGREES.	CTION CONCERNING PIAI	H LINE 2	7 CEC.	5	HAN S DEGREES.	,
AUTOPILOT-SAUARE-A/B PROGRANMER	CT-98-040-273 TRANSFORMER, EXCITATION	FAR R7-04355-1	1060901	E.1		TRANSONICS TB-ES14	260432
FAILURE MODE-OUT OF SPEC	SPECIFICATION-PRIMARY OF THE EXCITATION TRANSFORMER DREW EXCESSIVE NO LOAD CURRENT.	ON TRANSPORMER DREW C	KCE881 VE	5 COAD C	ğ	÷	
CORRECTIVE ACTION-NOWE.	CAUSE OF FAILURE WAS UNDETERMINED.	•					
AUTOFILOT-SQUARE-A/B	F4-7CD-0Z-530Z FUSE	COMPOSITE-B FACT	530£	ETR-14	£ 4		***
FAILURE MODE-THE SIGNAL M THE SIGNAL MAS SUCESSFL	FAILURE MODE-THE BIGMAL MOMITOR FUSE MOMITORING THE ASCENT TIMER DISCRETE TO THE UPPER STAGE FAILED TO SLOW ALTHOUGH IT THE SIGHAL HAS SUCESSFULLY TRANSMITTED. THE FAILURE HAS ATTRIBUTED TO THE TYPE OF FUSE BEING USED.	T TIMER DISCRETE TO TATTRIBUTED TO THE TYP	HE UPPER I	TAGE FAIR	ş _i	D BLOW ALTHOUG	
SYSTEM EFFECT-IMPROPER DISCRETE SISMAL.	DISCRETE SIGNAL.						
WENICLE EFFECT-TEST DELAY.	AV.						
CORRECTIVE ACTION- BUBBER	CORRECTIVE ACTION-SUBSEQUENT TESTING MAS ACCOMPLISHED USING LITTEL FUSES.	ME LITTEL FUSES.					
						PASE 0184	

STATEN SUB-SYSTEN	FAILED COMPONENT NAME PART NUMBER D	DIF DATA SOURCE	VEHICLE GATE DIF	11 ME 01F	# 5 E 5	VENDOR MANE VENDOR PART NO	
AUTOP1LO7-SQUARE-A/B	A-SD-D4-5086 PROGRAPHER SAFE/ARM SMITCH	FAR 7-41011-008	736	Ę	្តិទ	7ES 6D/C	•
FAILURE MOGE-PRENATURE VALVE FIRED, AND OTHER BAFE, CRMED BAFE BATTON BEIMG GIVEN WHILE THE P	FAILURE MOGE-PRENATURE OFERATION- THE PROGRAMMIR INTEGRATOR AUTOPILOT GROUP WAS REJECTED WHEN THE COMAX SEPARATION VALVE FIRED, AND OTHER PROGRAMMER ARMISAFE INDICATOR INDICATED SAFE, AND OTHER PROGRAMMER ARMISAFE INDICATOR INDICATED SAFE, AND B ARMED, THIS WAS CAUSED BY A COMMIT STOP COMMAND SEINE BEING GIVEN WHILE THE PROGRAMMER WAS ARMING IN A PREVIOUS TEST, (THIS CAUSES A LOSS OF THE ARM COMMAND).	OR AUTOFILOT SROUP WATER ALTHOUGH THE PRINCE AND BARNED. THIS TREET, (THIS CAUSES A	AS REJECTED SCRAHOER AS STANS CAUSS LOBS OF TA	ED WHEN THE COMAX ARM/BAFE INDICATO 195D BY A COMMIT B THE ARM COMMAND).	001CA	AX SEPARATION TOR INDICATED STOP COMMAND ().	
CORRECTIVE ACTION-RAR (CORRECTIVE ACTION-RAR A-90-24-4078 MRS ISSUED TO DESIGN GROUP RECOMENDING AN AGE LOGIC DESIGN CHANGE TO PREVENT RE HARDNEE OF THIS FAILURE MODE, TOP 2098 WILL INCORPORATE LOGIC CHANGE.	GROUP RECOMENDING AN LOGIC CHANGE.	76E LOGIC	DEBIGN CO	A HGE	TO PREVENT RE	
AUTOFILOT - SQUARE - A/B PROGRAMMER	SLV-99-04-3083 LOGIC 5 CIRCUIT BOARD	FAR 60-47841-8	66 0210	PACIORY	ភូទ)/gs	******
FAILURE MODE-FAIL DUCITION TON 18 MAS DIFFICULT TO	LING OPERATION- THE LOGIC 5 CIRCUIT BOARD FAILED WHEN THERE WAS NO ZERO-TIME INDICATION AND SWI TO MENET. FAILURE WAS TRACED TO A DEFECTIVE Q-E TRANSISTOR (HATASS) WHICH WAS CONTAHINATED.	CAND FAILED WICH THE ECTIVE G-E TRANSISTO	E MAS NO 2 1 (MA7833)	ERO-71ME MHICH MAI	<u> </u>	CATION AND BHI	
CORRECTIVE ACTION-REIN -98-04-50541.	ACTION-PEIMSTITUTED 100 PER CENT RECEIVING INSPECTION ELECTRICAL TESTS FOR ALL TRANSISTORS.	PECTION ELECTRICAL T	CBTB FOR AL	A. TRAIGET	10 10	. GREF RAR BLV	
AUTOFILOT-SQUARE-A/B PROGRAMMER	SLV-AP-18-132-F Arning Dévice.	FAR E7-54E44-601	\$30£	ETR		3/Q 3	990447
FAILURE MODE-FAILED TO TWO.	TO OPERATE AT PRESCRIBED TIME, BY PAILING TO TRANSFER THE DESTRUCT SIGNAL FROM RECEIVER NAMER	LING TO TRANSFER THE	DESTRUCT 6	I COLAL PRE	H F	CEIVER HANGER	
CORRECTIVE ACTION-HOME	SINCE THE FAILURE WAS UNCONFIRMED.						
AUTOFILCT BRUARE-A/B	SLV-AS-18-133F PONEN AND SIGNAL CONTROL UNIT.	FAR R7-54256-815	9304 •40£0	PACTORY		5/ 03	087049
FAILURE MOSE-STRUCTURAL	URAL. UNIT PAILED DUE TO IMPROPER INTER COMMECTED MIRING ERROR.	R COMECTED WIRING E					
CORRECTIVE ACTION-60/C	CORRECTIVE ACTION-60/C BUALITY CONTROL CORRECTIVE ACTION BY INFROVED INSPECTION REQUEST THROUGH RAR BLV-AB-18-3636.	BY INFROVED INSPECTION	M REGUEST	THROUGH I	4	LV-AD-10-3636.	
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	9981 200 11	DIFFICULTIES REVIEW-AUTOFILOT STREEM-AIRBONNE	ILOT SYSTEM-AIRBOX	¥		t		_
	ATOTEX S.G STOTES	TEBTAREPORT NUMBER FAILES COMPONENT NAME	DIP DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	11 ME 01F	2 ž	BITE PRI VENDOR NAME	
	AUTOPILOT-SQUARE-A/B PROGRAMMER	PE-YCD-D3-30Q1 PROGRAMMER	COMPOSITE-S FACT	\$001 \$40£01	ETR12	2 2		:
	FAILURE MODE-MEASURENEN CE DISCRETE AND THE PROG	FAILUME MODE-MEASUMEMENT SIEABK-MELEABE PAYLOAD-DID MOT DROPOUT AB IT BMOULD DUMING THE INTERVAL BETWEEN YNE GUIDAN E DIBCRETE AND THE PROGRAPHER BACKLUP, SATISFACTORY REBULTB HAD BEEN OBTAINED WITH A DIFFERENT PROGRAPHER.	OUT AS 17 SHOULD D	URING THE	INTERVAL ERENT PR	2 8 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ER YNG GUIDAN ER.	
	SYSTEM EFFECT-INFROPER DISCRETE SIGNAL.	DISCRETE SIGML.						
	VENICLE EFFECT-HOME.							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	CORRECTIVE ACTION-OFFIN-	CORRECTIVE ACTION-OFEN-PAILURE UNDER INVESTIGATION.				l		
	AUTOFILOT-SQUARE-A/B PROGRAMMER	SLV-88-D4-5081 ROLL DISPLACEMENT FYRO	FAR 69-42002-837	0080 99	ž	ğg		000040
	FAILURE MOSE-STRUCTURAL TO MAYE BEARING DETERIO	FAILUNE MOSE-STRUCTURAL-GYRO PACKAGE REJECTED FOR INTERHITTANT GRINDING MOIBE. THE ROLL-DISPLACEMENT GYRO MAS FOUND To mave bearing deterioration	INT SRINDING NOISE.	THE ROLL-	DI SPLAČE	T T T	deno eus cued	
	CORRECTIVE ACTION-6D/C TO BE HELD IN ABEYANCE.	GO/C PROPOSED ECP TO INVESTIGATE SPIN MOTOR BEARINGS AND LUBHICATION. THIS PROPOSAL WAS DIRECTED MC. PENDING FINAL DIRECTION FOR INCORPORATION OF GO/C 8 NEW AUTOPILOT SYSTEM.	PERRINGS AND LUB	RICATION.	THIS FROM	OSAL.	MAS DIRECTED	
	AUTOFILOT - SOUARE-A/B	31. V-98-04-5094 Programmer_Thans13Ton	FAR 69-42001-681	** 018*	ETR	YES 60/C	D/C	19048
	FAILUKE WYDE-FAIL DURIN ROGRANMER JAS RUMMING, F UMS CAUSED BY INTERNAL	FAILURE WIDE-FAIL DURING OFCRATION. PROGRAMMER MAS REJECTED WHEN THE ZERO-TIME INDICATION DID NOT GO OUT MHEN THE P OGRAMMER HAS RUMMING. FAILURE MAS TRACED TO LOM SMEANDOM MOLTAGE IN 8-1 TRAMSISTOR ON THE ASAR CIRCUIT BOARD. THIS WAS CAUSED BY INTERNAL CONTAMINATION OF THE TRAMSISTOR.	WEN THE LERO-TIME LTAGE IN 0-1 THAM	INDICATION OF THE	N DID NO	0 E	OUT WEN THE P	and the second s
	CORRECTIVE ACTION-REINS STOCK THROUGH RECEIVING	REINBITTUTED 100 PER CENT RECEIVING INBPECTION OF ALL TRANSIBTORB. RECYCLED ALL TRANSIBTORS FROM VING INSPECTION.	TION OF ALL TRANSI	STORS. REC	VCLED ALI	TREE.	4313TORS FROM	and the same of th
	AUTOFILOT-SEGARE-A/B PROCEASSER	BLV-88-04-5086-F FLECTRICAL COSMECTOR	FAR 68-42001-689	640168	FACTORY	99	CONVAIR	******
	FAILURE MODE-OUT OF TOLE ECOND PERIOD, PROBLEM CA TION MAD MEVEN SEEN SOLD	FAILURE MODE-OUT OF FOLERANCE. DURING PAT VIBRATION, ROLL VOLTAGE BIGNAL DECREARED APPROXINATELY 50 PERCENT FOR R & ECONO PERICO, PROBLEM CAUSED BY FAULTY CONNECTION IN THE MONITORING CIRCUIT OF TEST ACCESSORY P/N 27-88488-1, COMMEC TION HAD MEVER SEEN SCLDERED.	LTAGE BIGHAL DECRE ITORING CIRCUIT, OF	TEST ACCES	KINATELY SORY P/H	0 A	ERCENT POR R B	
•	CORRECTIVE ACTION-TEST ACCESSORY WAS REPAINED.	ACCESSORY WAS REPAINED.						
							PAGE DIRE	

COMPAIR DIVISION

DIFFICULTIES REVIEW-AUTCHILOT SYSTEM-AIRBORME

•	**0580		20308	215040		463374		
SITE PRI VENDOR MAME TIME DIF OTH VENDOR PART NO	FACTORY NO 60/C 69	NOT BE EVALUATED -NIDNEST NO.2 CH118- DUE TO AN AC ENVE A FAULTY GALVO INTERACTING NITH CHANGEL N1 OF THE BANK	CIRCUIT D		NO NDED DUE 13 A EVOC SETUP O	FACTORY YES AS	THE SMITCH IS CUTPUT. THE CR-1 IN THE BMITCH IS BAF	PA6E 0127
WEHICLE DATE DIF		HIDWEST NO.I	# 646124 F1	VERAL CHANGE	940117 13 NOT RECO	900159	HIBITED BY THAT DICOE BENGLY.	
DIF DATA BOURCE PART NUMBER	COMPOSITE-FACTORY 89-4EDD1-853	HOT BE EVALUATED	FAR 69-42001-629 13 8CC0408. TRAMSE D BY LACK OF A MELD	CE UNIT HAS MADE SE	. PROGRAM TORGUING M	FAR \$5-41001-615	PRATIC OPCRATION EX 1. AMALYDID REVEALED 1.4 CIRCUIT BOARD AB 1.4 KIRONIT BOARD AB	
TEST/REPORT NUMBER	\$DC/A&U&3-DQ1-37/PC-CO-D1-DQ71-D21 COMPOSITE-FACTORY	OPERATION, PITCH PROGRAM PROFILE COALD NOT BE EVALUATED -MIDNEST NO.E CHESS- DUE TO AM AC ENVI The chambel. This problem resulted from a faulty salvo interacting with chambel 3s of the same	SLV-89-D4-5088 ASAI CIRCUIT BOARD TRANSISTOR 89-4EDGI-6E9 OPERATION, PITCH OUTPUT MAS ERRATIC AT 15 SECONDS. TRANSISTOR 8-3 HAT534 ON THE ASAI E AN INTERNITANT OUTPUT, PAILURE CAUSED BY LACK OF A MELD BETWEEN BASE LEAD AND BASE	CORRECTIVE ACTION-TRANSISTOR HAD BEEN HADE BEFORE 1942, SINCE UNIT HAS HADE SEVERAL CHANGES IN BONDING PROCEDURE HA E BEEN HADE TO ELIMINATE THIS TYPE OF FAILURE. TOPILOT-SQUARE-A/B (20C/AGUNS-001-34/FC-CO-01-0038-001 COMPOSITE-FACTORY 3801 FACTORY NO 60/C	PROGRAMMER-MOTOR TOLERANCE, THE 13 SECOND DURATION ROLL PROGRAM TORBUING MAS NOT RECORDED DUE 13 A EVDC SETUP GLACE) AD.4 VOC SETUP MAS REQUIRED. URING OPERATION.	BLY-A8-04-5064F CIRCUIT BOARD/DIODE	FAILURE HOSE-SHORT-ELECTRICAL. DURING TROUBLESHOOTING FOR ERRATIC OPERATION EXHIBITED BY THE SMITCH 13 OUTPUT, THE MATCH 13 OUTPUT LING MAS OPEN-CIRCUITED. THE BRITCH 13 SAF COLPUT LING MAS OPEN-CIRCUITED. THE DIGGE IS PART OF THE A-4 CIRCUIT BOARD ASSENBLY. CORRECTIVE ACTION-FAILURE CONFIRMED. NO CORRECTIVE ACTION TAKEN.	
のでは、 の 1 年 1 年 1 日 日 日 日 日 日 日 日 日 日 日 日 日 日 日	AUTOPILOT-BRUARE-A/9 PROGRAMMER	FAILURE MODE-ERRATIC OF LOFE : MTERFERENCE ON THE RECORDER.	AUTOFILOT-BAUARE-A/B PROGRAMBER FALLURE HUNE-EARATIC OF OARD MAS FOLAD TO HAVE AI	CORRECTIVE ACTION-TRANSISTOR HAD BEEN HADE BEEN WE BEEN HADE BEEN ALL THIS TYPE OF FAILURE. AUTOFILOT-SQUARE-A/B (GC/AGUR)-DD1-38/FG-C	8 . 3	AUTOPILOT-BEUARE-A/B	FAILURE HODE-BHONT-ELEC BHJTCH 13 OUTPUT UNS THAI E OUTPUT LINE HAS OPEN-C CORRECTIVE ACTION-FAILU	

SEMERAL DYNAMICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT STREM-AIRBORME

11 JUN 1366

AUTOFILOT-SQUARE-A/B SLV-AB-D4-3080 PROGRAHMER SMITCH SMITCH FAILURE HODE-ERRATIC OFFRATION, DURING FAILURE LAS NOT CONFIRMED, THE CAUSE OF HE ACCIDENTAL SHORT CIRCUITING DURING TR		The second secon	-	STREET, STREET			
FAILURE MODE-ERRATIC OPERAT FAILURE WAS NOT COMPIRMED. T ME ACCIDENTAL SHORT CIRCUITI	8LV-48-04-5046F 8witch	FAR 83-41001-615	2900 451000	FACTORY	YE& 60/C	3/Q 9	* 308 4
	FAILURE HODE-ERRATIC CPERATION, DURING HISSILE CHECKOUT, BMITCH IS OUTPUT DROPPED & TO 4 VOLTS INTERMITTENTLY. FAILURE WAS NOT COMPIRMED. THE CAUSE OF THE INTERMITTENT OUTPUT LEVEL CHANGE WAS EITHER DESTROYED OR WAS MASKED ME ACCIDENTAL SHORT CIRCUITING DURING TROUBLESHOOTING OR RESULTED FROM TEST EQUIPMENT MALFUNCTION.	HISBILE CHECKOUT, BMITCH IS OUTPUT DROPPED & TO 4 VOLTS INTERMITTENTLY. THE INTERHITTENT OUTPUT LEVEL CHANGE MAS EITHER DESTROYED OR WAS MASKED IOUBLESHOOTING OR RESULTED FROM TEST EQUIPMENT MALFUNCTION.	PED E TO A	ESTROYED	MIEAN S .	ITTEKTLY, TME NB MASKED BY T	
CORRECTIVE ACTION-FAILURE N	CORRECTIVE ACTION-FAILURE NOT CONFIRMED. NO CORRECTIVE ACTION TAKEN.	ION TAKEN.					
AUTOFILOT-SQUARE-A/B FT PROGRAMMER RE	FTA8577/F4-7CO-05-5501 RESET RELAY	COMPOSITE-B FACT	5301 630050	-160	<u> 9</u> 9	-	•
FAILURE MODE-FAIL TO CEASE ER TO THE PROGRAMMER, CAUSEZ	cease operation at prescribed time. Loss of cape industrial power, resulting in LGSs of ac foom Laused a reset bignal to be generated for approximately e himutes.	OSS OF CAPE INDUSTRI. FOR APPROXIMATELY E	AL POSER. HIMUTES.	RESULTIN	=	LCAS OF AC POA	
BYSTEM EFFECT-OPERATION TOO LONG BO SECONDS MAXIMM SPECIFICATION.	SYSTEM EFFECT-OPERATION TOO LONG. RESET SIGNAL WAS GENERATED FOR APPROXIMATELY E MINUTES WHICH IS IN EXCESS OF THE O SECONDS MAXIMM SPECIFICATION.	ED FOR APPROXIMATELY	R MINUTEL	514	=	EXCESS OF THE	·
WENTELE EFFECT-COMPOSITE DE	TE DELAYED.						
CORRECTIVE ACTION-REPLACED PROGRAMMER PER IR M074425.	PROGRAHMER FER IR NOT4425.						
AUTOPILOT-SQUARE-A/E SA	8LV-99-64-5062P 8ai Tch	FAR 69-41001-671	6506£4	PACTORY	ves Ves		
FAILURE MODE-FAIL DURING OPERA RESET DURING STRESS-LIMIT TEST AS DUE TO AM IMPROPER SESUENCE	FAILURÉ MODE-FAIL DURING OPERATION. AFTER COMPLETION OF BTRESS LIMITS TEBTS IT MAS REPORTED THAT SMITCH RG DID NOT Reset during btress-limit test vibration along the K-axis, per procedure trostrosga, the Failure was confirmed and w as due to am inproper bequence in re-applying a-c and D-c power after power was turned off.	RESS LIMITS YESTS IT PER PROCEDURE TPSSPE CHER AFTER POMER MAS	1 1443 REPORT	FAILUME .	1 0 0 M	CH EG DID NOT CHFIRMED AND W	
CORRECTIVE ACTION-FAILURE C	CORRECTIVE ACTION-FAILURE CONFIRMED. NO CORRECTIVE ACTION TAKEN.	TAKEM.					
AUTOFILOT-SQUARE-A/S BL	BLV-99-04-5062P CINCUIT BOARD/TRANSISTOR-ENSST	FAR 69-41001-671	450054	FACTORY	ž 9		***************************************
FAILURE MODE- ELECTRICAL OF E FAILURE NAS CONTRINED AND ET-18551-AD7, 8/M 5010041) 8	FAILURE MODE- ELECTRICAL OPEN. AT THE BEGINNING OF FAILURE ANALYBIB TESTING, THERE WAS NO ZERO LIGHT INDICATION. TH E PAILURE WAS CONTINED AND WAS DUE TO TRANSISTOR 8-2 (RNS37) ON CIRCUIT BOARD IN THE ASAR HIGH FOWER ASSENDET ET-78551-807, 8/M SOLDDAS) BEING BURNED OPEN BY SMORTING CIRCUITING THE ZERO TIME LIGHT QUIPUT DURING TROUGLESMOOTIN 6.	ANALYSIS TESTING, T 7) ON CIRCUIT BOARD RCUITING THE ZERO TI	HERE MAS I IN THE ABJ	to zero L Le Hich P Wifut Bu	E SE	Indication. Th Absendly (P/N Trougleshootin	,
CORRECTIVE ACTION-PAILURE C	CORRECTIVE ACTION-FAILURE CONFIRMED. NO CORRECTIVE ACTION TAKEN.	TAKEN.				e de la constitución de la const	
						PA6E 0128	

SENER. DYNAMICS CONVAIR DIVISION

- 1	*	DIFFICULTIES REVIEW-AUTOFILOT STRUKEN-STRUCKING	FILOI STRICKFAIRBON			l		
L	BVBTEN BUB-378TEN	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	*17E	= = = = = = = = = = = = = = = = = = =	SITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	
1	AUTOFILOT-SQUARE-A/B	SLY-59-04-5042P CIRCUIT BOARD/RELAY RSSMLP48	FAR 89-41001-871	*2005	FACTORY	ž 3		
	FALLURE MODE-FAIL DURING AND 11 LAS INDICATED THA LOADING AT THE LOM-FREQUE LLD MOT RESET WITH THE AU LIKELY DUE TO K-1 MELAY AY 18 A COMPONENT ON THE	FAILURE MODE-FAIL DURING OPERATION, DURING THE FAILURE AMALYSIS CONTROL TEST CONTROL TASK HISTORY DATE.MAS REVIEWED AND IT LAS INDICATED THAT DURING THE TIME WEREN THE WEREN AT ENDING AT THE LOADING AT THE SALORIEMED APPORTED AFFORMER TO RESE SWITCHES NO THE SALORIEMED AT THE HIGH POWER SWITCHES TO RESET WAS MOST ATTRICT OF THE MIGH POWER SWITCHES TO RESET WAS MOST AT THE ALCOMOTIC RESET WAS MOST AT THE ACCOMMENT ON THE RIGH POWER CROUTED AT THE A COMPONENT ON THE POWER CROUTE BOARD ASSEMBLY (P/N 27-73351-807).	TAIS CONTROL TEST CONTROL TEST CONTROL WAS ATTEMPTED THE TAILURE OF THE SERIM SELT (P.N. ET-75351-86	ONTROL TABLED CONTROL TABLED CONTROL EN THEST CONTROL	CHISTON THE HIGH SWITCHES	Y O Y	E-MAS REVIEWED 37 ACCEPT THE 38 AWITCHES NO RESET NAS MOST LTION THIS REL	
	CORECTIVE ACTION-RAR SLY-99 6E TO ITS INTERNAL MECHANISM.	CORRECTIVE ACTION-RAR SLY-99-04-5064 WAS ISSUED RECOMENDING A NEW RELAY THAT CAN WITHE 'SND VIBRATIONS MITHOUT DAMA E TO 113 INTERNAL MECHANISM.	IG A NEW RELAY THAT (CAN WITHS"	NO VIBRA	1106	S METHOUT DAMA	
	AUTOPILOT-SQUARE-A/B PROGRAMMER	BLV-99-04-5082P CIRCUIT BOARD/CAPACITOR	FAR 69-41001-871	830884	PACTORY	YES 17? HO	14.5	3
	FALLURE MODE-FAIL DURING -S, 2/N 4090004) NAS K-RA RATIC SMITCH ACTION (BOTH MG IN TRANSIENTS IN THE P	DURING OPERATION, DURING THE FAILURE AMALYSIS CIRCUIT BOARD ATAI POWER SUPPLY BOARD (P/N 27-45845) AND REVEALED THAT THE CAPACITOR C-4 TANTALUM SLUG WAS BROKEN OFF ITS FLANKE SUPPORT. ER A BOTH HIGH AND LOWD COULD BE ATTRISUTED TO CAPACITOR C-4 INTERHITTENTLY SMONT-CIRCUITING RESULTI THE PLUS 43 YOLT DC OUTPUT.	YSIS CIRCUIT BOARD / I C-4 TANTALUM SLUG / TO CAPACITOR C-4 IN	ATAL POMER AS BROKEN TERMITTENT	2000 Y	8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(P/N 27-45845) AE SUPPORT. ER JITIMG RESULTI	
	CORRECTIVE ACTION-RAR SL	CORRECTIVE ACTION-RAR SLV-89-04-8085 WAS ISSUED RECOMENDING THAT ALL ITT NET ELECTROLYTIC TANTALUM CAPACITORS MADE WITHOUT A TEFLOM BASKET BE FURGED FROM STOCK AND FROGRAMMER POMEN SUPPLY BOARDS.	HE THAT ALL ITT MET I	ELECTROLYT	IC TANTAL	3	IPACITORS MADE	
1	AUTOPILOT - SQUARE - A/B PROGRATHER	34.7-99-24-5082-F RE RELAY	FAR - 88-41501-871		FACTORY	ដូច		15434
	FAILURE MODE-FAIL TO CPE REPORTED SWITCH 2D DID N N A'L HIGH POMEN SMITCHED RESULYED IN SMITCH ED MOT ME NI. RELAY.	FAILURE MODE-FAIL TO OPERATE. THIS AUTOPILOT PROSRAMMER WAS REJECTED AFTER COMPLETION OF STRESS LIMIT TESTS. IT MAS REPORTED SMITCH 20 DID NOT RESET DURING STL VIBRATION ALONG THE K-AXIS, PER PROCEDURE TPOSPESSA. PHICH TO REJECTION A 2'L HIGH POWER SMITCHES HAD FAILED TO RESET; POWER WAS TURNED OFF AND IMPROPER SEQUENCING ON REAPLYING THE POWER RESULTED IN SMITCH 20 NOT RESETTING. PAILURE OF ALL SMITCHES TO RESET WAS MOST LIKELY DUE TO A DEFECTIVE BEARING IN THE KS. DELAY.	REJECTED AFTER COMP. THE K-AXIB, PER PROPERTY OF AND INPROPERTY OF RESET WAS MOST LITTLE OF RESET WAS MOST MOST LITTLE OF RESET WAS MOST MOST MOST MOST MOST MOST MOST MOS	LETTON OF SEGUENCIT R SEGUENCIT RELY BUE	STRESS L	THE 40	TESTS. IT MAS OR TO REJECTIO ING THE POMER I BEARTH IN T	
	CORRECTIVE ACTION-NOME.							
1 3 5	autopilot-Beurre-A/B Programmer	BLV-99-04-9043F Transistor	FAR 69-61001-815	711E \$500E1	FACTORY	÷ 9	YES ENLESE HO	
	FAILURE HODE-OPEN (ELECT MED. FAILURE CONFIRMED AN	(ELECT.)- UNIT REJECTED DURING P.A.T. FOR PROGRAMMER PUNCTIONS OPERATING AHEAD OF THEIR NORMAL TI INED AND ATTRIBUTED TO AN INTERNITIENT OPEN CIRCUITING ENITTER CONNECTION IN A BRIESE TRANSISTOR.	I PROGRAMER PUNCTION IN CIRCUITING ENITTE	NS OPERATI	N6 AHEAD ON 3H A 1	5 7 7	HEIR MORNAL TE E TRANSISTOR.	
	e de la companya de l						PAGE OLES	_

GENERAL DYNAMICS CONVAIR DIVISION

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VENDOR MANE		YES BELOCK NO 211-102, 5/N 9 04-0044	1 P/N 211-182, B		YES RSSMLPGB NO	HOMEN SMITCHES HUSED BY AN OPEN 15551-607, S/NS+ LLES, THE DESIGN	INCLUDE A RELAY		I, THE HIGH POME CULTED COL. IN T IN VIBRATION CYC	IC.	
ATTE PRI	4		HE FAILURE WANTED	de la capacita de la	FACTORY YES	NG, THE HIGH- ED AND WAS CA COARD PAN ET-1 VIBRATION CYC	.T CIRCUIT TO	FACTORY TES	ATION TESTIM AN OPEN CIRC NT VERIFICATION	ITESTON FAILU	
VEHICLE DATE DIF		650817	UENCING, 1 OUTING BEG ROUTING A1		016084	TION TESTI	APE 28 VOL	010060	AT VERIFIC CAUSED BY THE SO PA	117 OF A 1	
NITREPORT NUMBER DIF DATA BOUNCE V		APPROVED SOURCE OF THI FAR 7-41011-895	PROGRAMMER STOPPED SEGNELAY KS74 OF THE SUB-RITION OF DEFICIENT WIRE.		FAR 89-41001-871	MCE TEST (PAT) VERIFICA THE REPORTED FAILURE M 344813 P/M RSSHLPGD ON D DURING THE 36 PAT VER	STING REDESIGN OF THE S	FAR 48-41001-871	R MAS REJECTED DURING P. NOT OCCUR. FAILURE MAS ROTATION INDUCED DURING ATION.	O HININIZE THE POSSIBIL	
TENTARFORT HUMBER FAILED COMPOMENT MANE		VENDOR WESTRAN WAS DROPPED AS AN APPROVED SOURCE OF THIS TYPE TRANSISTOR. A-90-04-3039F CIRCUIT BOARD WIRING 7-41011-895	FAILURE MOSE-ELECTRICAL SHORT, GURING A LOOP TEST, THE PROGRAMMER STOPPED SEQUENCING. THE FAILURE WAS CONFIRMED AND LAS CAUSLD BY A SHORT-CIRCUIT BETHEEN PINS 2 AND 7 OF RELAY K374 OF THE SUB-ROUTING SEQUENCE (BELOCK P/N 211-192) & M RO4-DO441. THE SHORT CIRCUIT NAS CAUSED BY A COMBINATION OF DEFICIENT WIRE ROUTING AT THE BASE OF THE RELAY, AN ACC (6 1/2 YEARS), AND VEBRATION EXPERIENCED IN MANDLING AND USE.	CORRECTIVE ACTION.	SLV-99-04-5055P CIRCUIT BOARD-RELAY	FAILURE MODE-ELECTRICAL OPEN-DURING PRODUCTION ACCEPTANCE TEST (PAT) VERIFICATION TESTING, THE HIGH-POMER SWITCHES SID NOT TURN OH AND THE ZERO-TIME SIGNAL DID NOT OCCUR. THE REPORTED FAILURE WAS CONFIRMED AND WAS CAUSED BY AN OPEN - CIRCUIT DO ON IN THE AFFE 28 NOLT RELAY! USS TYPE UNGASSIS PARENS BY RESHED ON CIRCUIT DOARD P/N ET-75551-807, 3/NA 4 D. RELY FAILURE NAS THE RESULT OF COLL ROTATION INDUCED DURING THE SE PAT VERIFICATION VIBRATION CYCLES. THE DESIGN OF THIS RELAY DOES NOT SHAIBIT COLL ROTATION.	BLY-88-04-8088 WAS WRITTEN REGUESTING REDESIGN OF THE BAFE RE WOLT CIRCUIT TO INCLUDE A RELAY Ilon.	3LV-99-04-5053-F RELAY	FAILURE MODE-ELECTRICAL OPEN, THIS AUTOFILOT PROGRAMMER WAS REJECTED DURING PAT VERIFICATION TESTING, THE MIGH POME R. MITCHES DID NOT TURN ON AUG THE ZERO THE SIGNAL DID NOT OCCUR. FAILURE WAS CAUSED BY AN OPEN CIRCUITED COIL IN T ME SAFE ES WOLT RELAY, RELAY PAILURE WAS THE RESULT OF ROTATION INDUCED DURING THE SS PAT VERIFICATION VISRATION CYC LES. THE DESIGN OF THIS RELAY DOES NOT INHIBIT COIL ROTATION.	SARE PROVIDCE REGUMDANT DESIGN TO MINIMIZE THE POSSIBILITY OF A MISSION FAILURE.	
SYSTEK SID-SYSTEK	eliminoples quinty eliminop	CORRECTIVE ACTION-THE AVIORILOT-SQUARE-A/B	FAILURE MODE-ELECTRICAL LAS CAUSED BY A SHORT-C' TH BOA-GOAA!, THE SHORT-C GE (6 1/E YEARS), AND VE	CORRECTIVE ACTION-NO CO	AUTOPILOT - SQUARE - A/B PROGRAMER	FAILURE MODE-ELECTRICAL OFEN-DURING PRODUCTIO BID NOT TURN ON AND THE ZERO-TIME BIGHAL DID N - CIRCUITED COIL IN THE BAFE 28 WOLT RELAY! UB 6, RELAY FAILURE WAS THE REBULT OF COIL ROTATION.	CORRECTIVE ACTION-RAR BLV-9 LESS SENSITIVE TO ROTATION.	AUTOFILOT-SQUARE-A/B PROGRAHMER	FAILURE MODE-ELECTRICAL N.WICHES DID NOT TURN HE GAFE ES MOLT RELAY. F LES. THE DESIGN OF THIS	CORRECTIVE ACTION-ECP 1	

GENERAL BYNAMICS CONVAIR BIVISION

Tomas and

18 JUN 1966

DIFFICULTIES REVIEW-AUTOFILOT BYBIEM-AIMBORNE

87876H 508-87876H	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE BITE PRI	111E 01F	PRI VENDOR NAME OTH VENDOR PART NO	M T NO	
AUTOPILOT-BEUARE-A/B PROGRAMMER	49F2487A RELAY	UTP-PAT 68-41001-871	630810	5/0 5	3/05 OH		40000
FAILURE MODE-FAIL TO GPER HIGH POMER SHITCHES FAILS RELAY COIL WINE OF SAFE + CORRECTIVE ACTION-ENS APP	TO CHERATE AT PRESCRIBED TINE, DURING END 2-AXIB PAT MERFICATION VIBRATION (38 TOTAL) CYCLE, ALL STRILED TO CHERATE AND THE ZERO TINE LIGHT FAILED TO INDICATE END OF RUN. CAUSED BY BREAKAGE OF SAFE + 128 YDC REFER TO FAILURE AMALYBIB REPORT 8LY-88-D4-5053-P FOR DISCUSSION OF RELAY PROBLEM. CAS APPROVAL TO SUBMIT ECP TO USE A NEW HI-REL RELAY FOR BLY AND CENTAUR. REFER TO MAP MD31512.	O Z-AXIB PAT MEZIFIK KHY FALED TO INDICA KEPONT &LW-99-D4-96 HI-REL RELAY FOR BLY	17E END OF 1882-P FOR E	ATION (B RUM, CAU MECUBBIO	SED BY BREAKA N OF RELAY PRO R TO MAP PD31	16 FE 6 FE	
AUTOP1LOT-SAUARE-A/B PROGRAMMER	GDC/BRF65-056/A2-601-00-147	COUNTDOWN	147F 630A0S	SAA?	YES 60/C H7		74594
FAILURE MODE-FAIL TO OPER	OPERATE AT PRESCRIBED TIME, PROGRAMMER WOULD NOT RECYCLE TO SAFE. PROGRAMMER WAS MANUALLY COMMINDED BAFE.	ER MOULD NOT RECYCLE	TO SATE.				
VEHICLE EFFECT-COUNTDOM DELAYED.	DELAYED.						
CORRECTIVE ACTION-UNKNOWN.	χ.						
AUTOPILOT-SQUARE-A/B PROGRAMMER		FLIGHT	147F	75 361.4	7E 0		166598
FAILURE MODE-FAILED TO GI IEVER DUE TO EITHER BAITG ANIBH.	FAILURE MODE-FAILED TO OPERATE AT PRESCRIBED TIME. EJECTION OF PAYLOND EJECTION MECHANISM (PEH) PAYLOND MAS NOT ACH IEVED DUE TO EITMER BAITCH FAILURE MITHIN THE AUTOPILOT PROGRAMMER OR FAILURE WITHIN THE AERONUTRONICS EJECTION MECH ANISM.	ON OF PAYLOND EJECTIC DENAMER OR FAILURE N	N MECHANIS ATHIN THE	M (PEH) AERONUTH	PAYLOAD WAS W ONICS EJECTION	or ACH FECH	
SYSTEM EFFECT-INFROMER DISCRETE SISMALS.	ISCRETE SISMLS.						
VEHICLE EFFECT-COMMANDS NOT SENT	NOT SENT.						
CORRECTIVE ACTION-NOWE.	CORRECTIVE ACTION-NOWE. IT HAS SEEN RECOMMENDED THAY BOTH IS AND TE SIGNALS FROM THE ATLAS PROGRAMMER BE INSTRUMENT D TO PROVIDE FAILURE POINT DETERMINATION.	TI AND TE BIGNALS FI	ION THE AT	AS PROGR	AMMER DE 1257	UMENT	
autopilot-bquare-a/b programmer	60/CZZM63-027-DA1036-/LA-7NO-03-71 COMPOSITE-FRD/DPL	7 COMPOSITE-FRB/DPL	7111 650731	PALC	NO GENERAL ELECTR NO 10	ILEC TA	
FAILURE MODE-PREMATURE OF	FAILURE MODE-PRENATURE OPERATION. DURING LOOP TEST OWE-HALF SCALE HEGATIVE PITCH COMMAND NORMALLY SENT FROM ABETS A T 185 TO 150 SECONDS MAS IMADVERTANTLY GENERATED S SECONDS EARLY.	F SCALE MEGATIVE PIT	ICH COMMAN	MORMALL	Y BENT FROM AL	4 413	
SYSTEM EFFECT-INPROPER AN BELIMS ACTED UPON.	R ANALOG BIGNALS, PROGRAMMER RECEIVED BECO DISCRETE FROM ABETS WHILE MESATIVE STEERING COMMAND	BECO DISCRETE FROM	ABET& WHI	C NEGATI	VE STEERING C	OH WHITE	
					244	PAGE 0131	

SENERAL DYMANICS CONVAIR DIVISION

18 JUN 1866

DIFFICULTIES REVIEW-AUTOVILOT STREEM-AIRBORNE

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·	2015 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2	TESTARFORT NUMBER FAILED COMPONENT MANE	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	\$177 TIME DIF	VEHICLE BITT PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO	VENDOR MANE ENDOR PART NO	
	VEHICLE EFFECT-HOME.							101.00
	CORRECTIVE ACTION-OPERATO	CORRECTIVE ACTION-OPERATOR INSTRUCTED TO BE MORE PRECISE.						
· · · ·	AUTOFILOT-SQUARE-A/B	HSCAPE D77/P4B-CD-D4-DACE SWITCH	COMPOSITE-J FACT	151	536 PLUS 20	y'3 9 9		:
	FAILURE MODE-FAIL TO OPER	FAILUME MODE-FAIL TO OPERATE AT PRESCRIBED TIME, PROGREMER DID NOT START, INVESTIGATION BHOWED THAT AGE SWITCH LCS. 13 MAS INCORRECTLY POSITIONED BY FOLLOWING THE PROCEDURE.	DID HOT START. INVE	8716A710N	avoleta Ti	IAT AGE SWI	ECH LCB	
	SYSTEM EFFECT-OPERATION DOES NOT START.	DOES NOT START.						
	WEHICLE EFFECT-COMPOSITE DELAYED	DELAYED.						
	CORRECTIVE ACTION-MACED	CORRECTIVE ACTION-MACED AGE SWITCH LCS 13 IN CORRECT POSITON.	÷.					
	AUTOFILOT - SEUARE - A/B PROCRAINGER	3LV-99-D4-5048F CIRCUIT BOXED RELAT	FAR 27-41001-629	650731	FACTORY	725 8354L P68 NO		** 503*
	FAILURE MODE-CONTAHINATION CONTESS ON CONTEST, POMER MAT HUT ON FAILURE, HOMEVER, TERRICAUSE OF THE FAILURE A. A.	IMATION-TIME-DURING PRODUCTION ACCEPTANCE TEST (PAT) VERIFICATION, THE PROGRAMMER HIGH-POMER SMI T ON COMMAND, THE FAILED INDICATION REPEATED AFTER THO CONSECTIVE VIBRATION TE-' AFTER THE SEC AUT OFF TO RESET THE SMITCHES AND THE FAILURE DISAPPEARED. FAILURE AMALTSIS COULD MOT COMFIRM I VEAR-DOAS EXAMINATION OF PELAY K-1 ON CIRCUIT BOARD P/N 27-401:7-1 INDICATED THAT THE PROBABLE. A. A CONTAMINANT IN THE BEARING, PREVENTING THE RELAY ARMATURE FROM MOVING.	E TEST (PAT) VERIFI ATED AFTER THO CONS AILURE DISAPPEARED. IRCUIT BOARD PAN ET MITHG THE RELAT ARK	CATION, THE CATION TO FAILURE A 401.7-1.1	E PROGRALIRATION TI	MER HIGH-PY COULD NOT CO THAT THE PI	DAER SMI THE SEC DAFTRH T	
	CORRECTIVE ACTION-NO CORR	CORRECTIVE ACTION.	. 0.	7.2				The state of the s
```	AUTOPILOT - F ZUARE - A / B PROGRAMER	4DC/ZZH65-DE6-DA1D37-/L4-7MD-D1-71 COMPOSITE-FRD/DFL 11 8MITCH	COMPOST TE-PRO/DPL	7111 650730	I	ž č		
	PAILURE MODE-ERRATIC OPERATION, DURING LOOP TEL N DROPPED SLIED SLIEN TIMES.	OPERATION, DURING LOOP TEST SMITCH 15 (SOU) MALFUNCTIONED, IT ACTIVATED AT THE PROPER TIME THE FLEE REPEATED SLIEN TIMES.	(BOJ) MALFUNCTIONED	. 17 AC11	ATED AT	HE PROPER	11 AC 11C	
	SYSTEM EFFECT-INFROPER DISCRETE SIGNALS	ISCRETE SIGNALS.						
	MENICLE EFFECT-COMMIDDIM OR COMPOSITE DELATED.	OR COMPOSITE DELATED.						
	CORRECTIVE ACTION-REPLACED PROGRAMMER.	ed programmer.						
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		and the second seco	AMARIA MARIA M				PAGE 0132	_

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

3731EH 848-373TEH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	SITE TINE DIF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B Programmer	BLV-8D-04-5047F CIRCUIT BOARD-RECTIFIER	FAR 69-42001-647	71-11	E	YES NO	** 5055
FAILURE MODE-FAIL DURING OF T THE PROPER TIME SEQUENCES. WAS DUE TO TEMPERATURE SHOCK	FAILURE MODE-FAIL DURING OPERATION, SWITCH 13 WOULD NOT TURN ON. THE TURN-ON PULSES APPEARED AT THE SWITCH OUTPUT, THE PROPERS APPEARED AT THE SEGUENCES, BUT THE SHITCH DID NOT MAVE A BUSTAINED OUTPUT. THE REPORTED FAILURE WAS COMFIRMED AND MS DUE TO TEMPERATURE SMOCK TESTS.	IN ON. THE TURN-ON PUBLISHED OUTPUT. TH	ULSES APPE E REPORTED	ARED AT TI FAILURE	HE SHITCH OUTPUT A.	
CORRECTIVE ACTION-PER RA	CORRECTIVE ACTION-PER RAR-SLY-90-04-8037 AN EXTERNAL LOAD HAS BEEN ADDED TO THE SILEON-CONTROLLED RECTIFIER OUTPUT	IAS BEEN ADDED TO TH	E SILEON-C	ONTROLLED	RECTIFIER OUTPUT.	
AUTOFILOT-SQUARE-A/B	SLV-A9-04-5031F ACCELEROMETER SMITCH	FAR 27-04099-1	5701 650728	FACTORY	YES EDCLIFF INSTRUNO MENTS	882038
FAILURE MODE-CONTANIMATION. 18 ATTRIBUTED TO EXCESSIVE NG PREVENTING THE PLUNGER FR	ION. THE ACCELEROMETER SWITCH SELF-TEST CIRCUIT HAD NO OUTPUT. THE FAILURE WAS CONFIRMED AND INE EPOXY ON THE SOLENOID PLUMEER CAUSING A BINDING ACTION BETWEEN THE PLUMEER AND ITS FITTI R FROM TRAVELLING ITS FULL RANGE AND ACTUATING THE ACCELEROMETER SWITCH.	EST CIRCUIT HAD NO LUSING A BINDING ACT	OUTPUT. TH ION BETWEE LEROMETER	E FAILURE H THE PLU SWITCH.	WAS CONFIRMED AND WEER AND 118 FIFTE	
CORRECTIVE ACTION-NOME.	NO CORRECTIVE ACTION-THIS IS THE ORLY FAILURE SINCE	AY FAILURE SINCE	PER 114-63 MAS CONDUCTED.	S MAS CON	DUCTED.	
AUTOPILOT-SQUARE-A/B PROGRAMER	SLV-99-04-5046F CIRCUIT BOARD-MRING	FAR 27-41001-629	92	FACTORY	YES	095053
FAILURE MODE-STRUCTURAL-DU NTLY. THE FAILURE WAS COMFI THE WIRES BROKE BECAUSE OF	FAILURE MODE-STRUCTURAL-DURING PRODUCTION ACCEPTANCE TEST (PAT) VERIFICATION. THE PROGRAMMER WOULD RESET INTERMITTE NTLY. THE FAILURE WAS CONFIRMED AND WAS CAUSED BY BROKEN WIRES IN THE PROGRAMMER REWOTE SET (PINZT-45205-803, SMIS). THE WIRES BROKE BECAUSE OF EXCESSIVE TENSILE STRESS APPLIED DURING 19 PAT VERIFICATION VIBRATION CYCLES.	(PAT) VERIFICATION. RES IN THE PROGRAME DURING 19 PAT VERI	THE PROGRAM R REMOTE S	HER VOUL	D RESET INTERMITTE -45205-803, SMLB). CYCLES.	
CORRECTIVE ACTION-NO CORRECTIVE ACTION.	RRECTIVE ACTION.					
autopilot-square-a/B Programer	8L V-99-G4-5048F SMI TCH	FAR 27-41001-629	650726	FACTORY	9 9	480394
FAILURE MODE-ERRATIC OPE OMFIRMED. AMALYSIS DETERN EST SET. THE CAURE OF THE	FAILURE MODE-ERRATIC OPERATION-SMITCH 9 CHANGED STATES LHEN THE SWITCH 11 RELAY DROPPED OUT. THIS FAILURF, WAS NOT OMFIRMED. AMALYSIS DETERHINED THAT THE FAILURE MAS DUE TO LINE COUFLING BETWEEN SWITCH 9 AND SWITCH 11 THROUGH THE EST SET. THE CAURE OF THE REPORTED FAILURE WAS IN THE TEST SET.	N THE SWITCH 11 RELA INE COUFLING BETWEEN BET.	Y DROPPED	OUT. THIS	FAILURE MAS NOT C H 33 THROUGH THE T	
CORRECTIVE ACTION-THE TEST	EST SET WAS REPAIRED AND SWITCH & OPERATION SECAME HORMAL.	PERATION BECAME HORP	ML.			
					PAGE 0133	· ·

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GENERAL DYNAMICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

848-87EH 848-875EH	FEST/REPORT NUMBER FAILED CONFORMS NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF 119	ME DIF OTH	VEHICLE BITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	
AUTOPICOT-SQUARE-A/B	SLV-99-04-5045F CIRCUIT BOARD TRANSISTOR-2HEESE	FAR 69-41001-819	850717 FAC	FACTORY YES W	TES MESTRAN NO	## 50 SE
FAILURE MODE-OPEN (ELEC 6, PROGRAMMER FUNCTIONS EPORTED FAILURE WAS COMP MAISTOR (4-E) OF BINNAY	(ELECTRICAL) -DURING PRODUCTION ACCEPTANCE TESTING (PAT) VERIFICATION SING/RANDOM VIBRATION TEATING (PAT) VERIFICATION SING/RANDOM VIBRATION TEATING (NOS MENE OSSERVED TO OPERATE AND OF THEIR NORMEL TIMES. THIS CONGITION WAS INTERHITENT, THE R. CONGINED AND WAS CAUSED BY AN INTERHITENTY OPEN-CIRCUITING EMITTER CONGITION IN A SHIESSE TRANKAT T-S ON CIRCUIT BOARD ALDS! (PAMET-805).	TEBTING (PAT) VERII HETR NORMIL TIMES, TI ENTLY CPEN-CIRCULTII 10964-803, B/NGES).	TICATION BINE HIS CONDITION WE EMITTER CO	/RANDON VIB WAS INTERN WASCTION IN	RATION TESTIM ITENT, THE R A EMIRSE TRA	
CORRECTIVE ACTION-MESTR	MESTRAH MAS DROPPED AS AM APPROVED SOURCE OF THIS TRANSISTOR.	OF THIS TRANSISTOR				
AUTOPILOT-SQUARE-A/B	60/C A6U43-001-41/FC-CO-01-0033-00 COMPOSITE-FACTORY E FOMER 3UPPLY	COMPOST TE-FACTORY	5302 850716	3 3	3/ 03	
FAILURE MODE-DRIFT, THE INTENSITY OF ALTSIS, THERE WAS ALSO & 120CPS, 0.1 TO GROUND LOOP PICKUP BETWEEN THE 1 NED WITHOUT GROUNDING IT TO DOCK 14.	FAILURE MODE-DRIFT. THE INTENSITY OF THE PITCH PROCRAM DIRECTLINE RECORDING MAS TOO LIGHT TO PERMIT GUANTITATIVE AN ALSO & 120CPS, D.1V PEAK-TO-PEAK BIGHAL SUFERIM-DOSD ON THE CHANNEL. THE EXTRANEOUS BIGHAL MAS DUE. TO GROUND LOOF PICKUP BETWEEN THE INLET AC POMEN SUPPLY AND THE CHECKOUT AGE. AN ADJACENT DOCK AC SUPPLY HAD BEEN USED WITHOUT GROUNDING IT TO DOCK 14.	CCTLINE RECORDING NA. FERINFOSED ON THE C. THE CHECKOUT AGE.	S TOO LIGHT I	O PERHIT GU XTRAMECUS S OCK AC SUPPI	TO PERHIT GUANTITATIVE AN EXTRANECUS SIGNAL NAS DUE DOCK AC SUPPLY HAD BEEN U	
SYSTEM EFFECT-ERRATIC OPERATION.	SYSTEM EFFECT-ERRATIC OPERATION. SCHOOLS FIFTER LANGUAGE BESTELLING BOST-COMMONITY TRATILL BESUISED.	A Brouters.				·
CORRECTIVE ACTION-DIREC	CORECTIVE ACTION-DIRECTLINE RECORDER INTENSITY ADJUSTED. THE ADJACENT DOCK WAS GROUNDED TO DOCK 14, ELIMINATING TH	INE ADJACENT DOCK NA	GROUNDED TO) DOCK 14, E	LINIMATING TH	
AUTOFILOT-BEUARE-A/D PROGRAMMER	69F2687A CANI STEM	UTP-SLT 66-41001-871	850716 GD/C	C YES 60/C	٥/٥	*0000
FAILURE HODE-FAIL TO OP HOT RUN, THE ZERO TIME LAD CAPACITOR IM + 43 YOL RUPPLY MODULE IMBTALLED.	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME, DURING Y-AXIS SLT VIBRATION, THE TEST SPECIHEN S/N 411-6036 MOULD NOT RUN, THE ZERO TIME LIGHT MOULD NOT LIGHT, ALTHOUGH FAILURE WAS NOT COMPIRED, SIMILAR PROBLENS OCCURRED DUE TO B AD CAPACITOR IN + 43 YOLT LINE IN POMER SUPPLY MODULE CAUSING MIGH RIPPLE VOLTAGE, SPECIMEN OPERATED WITH NEW POMER SUPPLY MODULE INSTALLED.	IXIS SLT VIBRATION, RE MAS NOT CONTINEE WE HIGH RIPPLE VOLTA	NE TEST SPEC 2. BIHLLAR PH 1E. BPECINEN	IMEN 9/N 41; OBLEMS OCCU OPERATED MI	1-6036 MOULD RRED DUE TO B TH NEW POMER	
CORRECTIVE ACTION-REFERENCE DIGITAL CIRCUITS TO SPRAGUE	CORRECTIVE ACTION-REFERENCE PAILURE LOG NO. 951-3-001. ECP 3480 MAS BEEN APPROYED WHICH CHANGED PROGRAMMER CRITICAL Digital circuits to sprague only capacitore.	3480 MAS BEEN APPRO	ACO WHICH CHA	HEED PROGRA	MER CRITICAL	
AUTOFILOT-SQUARE-A/8 PROGRAMMER	FTA8363/P6-MD-01-0AC6 CAPACITOR	COMPOSITE-FRD/DPL 58-41001-811	151D 368	£ 9		

FAILURE, MODE-BHORT (ELECT). SHOUND MONITORING BYSTEN PLACED A REVERSE BIAS ON THE TANTULUUM CAPACITOR IN THE STASING 6 DISCRETE INCUT CIRCUITRY CAUSING IT TO SHORT. DURING THE SAP TEST, THE SHORT DURATION SUIDAMER STASING DISCRETE SHOULD IN FAILED TO EFFECT INITIATION OF THE STASING SEQUENCE.

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NATION OF THE PARTIES TABLE TO THE PARTIES OF THE PROPERTY OF THE PARTIES OF THE PROPERTY OF THE PARTIES OF THE PROPERTY OF THE PROPERTY OF THE PARTIES OF T	
ION. THE PROBLEM WAS LOCALIZED TO THE PROGRAMMER POWER SUPPLY AND CIRCUITRY COMMON TOE AND THE HIGH FOWER SMITCH ZO (SECO) TRIGGER. RE COMPONENTS WERE IDENTIFIED, IN AD TRAY, THAT COULD MAVE FAILED INDIVIDUALLY AND CAUSED THE MALFUNCTION. THE PRIMARY SIDEATION AND SHOCKA ASSOCIATED MITH BECO. SIGNALS. AT BECOME, SAS SECONDS THE PROGRAMMER PACKAGE ERRONEOUSLY GENERATED THE SEC RATING OF 400. MER EMEINE CUTOFF AND MISSION FAILURE. INCORPORATION OF SPECIAL DIODES (2) ELIMINATION OF ALL DIPPED CONFORMAL COATED CIRCU ON SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF WEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF WEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF WEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF WEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF WEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF WEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF NEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF NEDESIGNED SERVOAMPLIF OR SMITCH RELAYS MITH RELAY	TON. THE PROBLEM WAS LOCALIZED TO THE PROGRAMER POWER SUPPLY AND CIRCUITRY COMMON TERAND THE MICH PROGRAMMER SUPPLY AND CIRCUITRY COMMON TERAND THE MICH PRIMARY STRAY, THAY COMMON THE PRIMARY STRAY, THAY COULD HAVE FAILED INDIVIDUALLY AND CAUSED THE MALFUWCTION. THE PRIMARY SIGNALS, AT SECONDS HAVE FRICKED MITH BECO. RIGHALS, AT SECONDS THE PROGRAMMER PACKAGE ERRONEOUSLY GENERATED THE SEC N-TIME OF 400. NEA EAGINE CUTOFF AND MISSION FAILURE. NEA EAGINE CUTOFF AND MISSION FAILURE. THOURPORATION OF REECIAL DIODES (B) ELIMINATION OF ALL DIPPED CONFORM. COATED CIRCU INCORPORATION OF REDESIGNED SERVOAMPLIF ANTICH RELAYS MITH SABCOCK PELAYS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF THAS HERSURED AS 6,14 INCHES AND LIMITS AND RESURED OF 0.15 TO 0.21 INCHES, ALSO, WOMES WITH LIMITS OF 0.030 70 0.040 INCHES, IN ADDITION, SEVEN SPECIMENS HAD ALL INSTINCTION TOLER IN THE INSERTS.
BIGHALD. AT BECONG. 343 BECONDS THE PROGRAMMER PACKAGE ERRONEOUBLY GENERATED THE BEC K-TIME OF 400. MER EMEINE CUTOFF AND MISSION FAILURE. INCORPORATION OF BPECIAL DIODES (2) ELIMINATION OF ALL DIPPED CONFORMAL COATED CIRCU ON BAITCH RELAYD MITH BABCOCK PELAYS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF 248.1 CAP-QUAL/PPT 650706 60/C YES 60/C NO NO	REGARDED AT BECOMES 443 SECONDS THE PREGRANMER PACKAGE ERRONEOUSLY GENERATED THE SECONDS 400. NER EAGINE OF 400. NER EAGINE CUTOFF AND MISSION FAILURE. INCORPORATION OF ALL DIPPED CONFORME COATED CIRCULAR EAGINE AND MISSION FELAYS AND MISSION OF ALL DIPPED COMFORME COATED CIRCULAR SHITCH RELAYS MITH BABCOCK PELAYS AND MISSION OF REDESIGNED SERVOAMPLIF 248.1 PAGE 1 REALL INSPECTION TEST, PARA, 4.1, ONE TEST SPECIMEN HAD DIMENTIONAL OUT IT WAS HEASURED AS 6.14 INCHES AND LIMITS ARE REQUIRED OF 0.15 TO 0.21 INCHES. ALSO, WHERE MITH LIMITS OF 0.030 7C 0.040 INCHES. IN ADDITION, SEVEN SPECIMENS HAD ALL INS THREADS THE MINIMUM REGUIREMENT, THESE DISCREPANCIES NARE CAUSED BY AN OUT OF TOLER IN THE INSENTS.
ER EJGINE CUTOFF AND RIBSION FAILURE. MICARORATICH OF SPECIAL DIODES (2) ELIMINATION OF ALL DIPPED CONFORML COATED CIRCU NI SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF 148-1 WHERE RAGES 128-1 RAGES 128-1 128-	GER EMEINE CUTOFF AND MISSION FAILURE. SHOORPORATION OF SPECIAL DIODES (2) ELIMINATION OF ALL DIPPED COMPORAL COATED CIRCULA SMITH BABCOCK PELATS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF 148.1 WHERE WE ST-04164-1 RMER WE WISHLE INSPECTION TEST, PARA, 4.1, ONE TEST SPECIMEN HAD DIMENTIONAL OUT THAS HEASURED AS 6.14 INCHES AND LIMITS ARE REQUIRED OF 0.19 TO 0.21 INCHES, ALSO, THAS HEASURED AS 6.14 INCHES AND LIMITS ARE REQUIRED OF 0.19 TO 0.21 INCHES, ALSO, THAS HEASURED AS 6.14 INCHES AND LIMITS ARE REQUIRED OF 0.19 TO 0.21 INCHES, ALSO, THAS HEASURED SPECIMENT OF 0.030 7C 0.040 INCHES, IN ADDITION, SEVEN SPECIMENS HAD ALL INS THAS HE INSERTS.
INCORPORATION OF SPECIAL DIODES (2) ELIMINATION OF ALL DIPPED CONFORMAL COATED CIRCU ON SMITCH RELAYS WITH BABCOCK PELAYS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF 246.1 246.1 27-04.66-1 NO NO NO NO NO NO NO NO NO N	INCORPORATION OF SPECIAL DIODES (2) ELIMINATION OF ALL DIPPED CONTORNAL COATED CIRCU ON SMITCH RELAYS MITH BABCOCK PELAYS AND (4) INCORPORATION OF REDESIGNED SERVOAMPLIF 248-1 CAS-1
UTP-QUAL/PPT 650706 60/C YES PT-04164-1 NO	CAMER 1 UTP-GUAL/PPT 650706 60/C YES 50/C YES 50/C YES 60/C YES 60
	DURING THE VISUL INSPECTION TEST, PARA, 4.1, ONE TEST SPECIMEN HAD DIMENTIONAL OUT IT MAS HEASURED AS 6.14 INCHES AND LIMITS ARE REQUIRED OF 0.15 TO 0.21 INCHES, ALSO, MCHES WITH LEMITS OF 0.030 TC 0.040 INCHES, IN ADDITION, SEVEN SPECIMENS HAD ALL INS THREADS THE MINIMUM REGUIREMENT, THESE DISCREPANCIES NERE GAUSED BY AN OUT OF TOLER IN THE INSERTS.

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	AYBIEK AND ANDTER	TEST/REPORT MUMBER FALLED COMPONENT HANG	DIF DATA BOUNCE	VEHICLE BITE PRI	111E DIF	2 5 2 5 2 5	VENDOR NAME VENDOR PART NO	
	CORRECTIVE ACTION FOTTI	CORRECTIVE ACTION POTTIME LABORATORY PERSONNEL MENE INSTRUCTED TO CLEAN POTTIME MATERIAL FROM INSERTS. REF. CTCTH IN. 531-4-018.	NUCTED TO CLEAN POTTIN	G MATERIAL	FROM IN	8CR 73	, REF. CTCTH N	******
	AUTOFILOT-SQUARE-A/B	49CE487.E RELAY K-1	UTP-8L7 94-73901-010	939069	5/8	2 9	YES UNION SMITCH NO RESHLPSEE	16000
	FAILURE MODE-FAILURE TO RESET USING THE AUTOMAT OF FAILURE, REFER TO FA	FAILURE MODE-FAILURE TO OPERATED AT PRESCRIBED TIME- DURING BLT Z-AXIB VIBRATION, THE HIGH POMER BUITCHES WOULD NOT Reset using the automatic reset or wannal reset. Relat X-1 on roard agar bearing bytcking has the most likely cause Of Failure, refer to Failure Log murger 331-3-002.	ING SLT Z-AKIS VIBRATI -1 CH RUARD AGAE BEARI	ON, THE HI	CH FOLER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HES WOULD NOT	·
······································	CORRECTIVE ACTION-AUTOP	CORRECTIVE ACTION-AUTOPILOT EXSIGN 18 PREPARING MAP FOR USE OF BABCOCK BRISK RELAY IN SLY AND CENTAUR PROGRAMS IN ACE OF PRESENT RELAY.	USE OF BABCOCK BRISK R	ELAY IN PL	V AND CE	HTAUR	PROGRAMS IN F	
	AUTOFILOT-SQUARE-A/B	LY-98-54-5039F Harkesamtring/Circuits	1 .R 27-41001-629	\$250 \$304£1	£18	YES 600) 9	993019
. 	FAILURE MODE-OUT OF TOL. CREASED IN AMPLITUDE PRO BY A LOOSE COMMECTION IN	FAILURE MODE-OUT OF TOLCHENCE-BURING AUTOFILDT SYSTEM CH CREANED IN APPLITUDE FROM D.4 TO 1.0 VOLT. THE FAILURE WAS BY A LOOSE COMMECTION IN THE AUTOFILOT SYSTEM AT ETR.	CHECKOUT, IT WAS REPORTED THAT THE ROLL SET VOLTAVE OUTPUT II WAS NOT CONTINNED. THE REPORTED FAILURE MAY MAVE SKEN CAUSED	D THAT THE	ROLL SE	9 4	BET VOLTAGE CUTPUT IN MAY HAVE REEN CAURED	
	CORRECTIVE ACTION-APPRO	CORRECTIVE ACTION-APPROPRIATE PERSONNEL AT ETR NERE INFORMED OF THE RESULTS OF THIS ANALYSIS. AS THERE WAS NO FAILU HE IN THE PROGRAMMER, NO FURTHER ACTION WILL BE TAKEN.	INED OF THE RESULTS OF	THES AMAL	7818. AS	7	E MAS NO PAILU	
	AUTOPILOT - SQUARE - A 'B PROGRAMMER	MSCAPEA180/P8-CO-01-0AC8	COMPOSETE-J PACE	1310	3	₹ ₹	5/CB	88.74.53
	FAILURE WODE-OUT OF TOL. UNHOUT THE PLUS COUNT. COUGH REDUMBANT CONTROL P	FAILURE MODE-OUT OF TOLERANCE. ATLAS AND CENTAUR PROGRAMMERS MERE IMADVERTENTLY OMERATED IN THE SAFE CONDITION THRO UGHOUT THE PLUS COUNT. CAUSED BY LATE MAMMAL EJECTION OF UMBILICAL PLOCE MERHITTING PROGRAMERS TO RETURN TO SAFE THR OLSH REDURDANT CONTROL PATHS.	HERS HERE IMBUERTEHTLINGIELICAL PIOCE PERHIT	Y OPERATED	AMERS TO	AT THE	COMDITION THEO	
	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS.	DISCRETE SIGNALS.						
-	VEHICLE EFFECT-COMPOSITE RESCHEDULED	T RESCHEDULED.						
1	CORRECTIVE ACTION-RERUN TEST.	, 128T.			*			- -
-	autopilot-beurhe-a/b Programma	CT-A8-04-207 841 TCH	FAR 55-41001-611	151D 650510	PACTORY	ភ្នំ ទ		
1	FAILURE MOSK-OUT OF TO. THE EXPECTED ACTUATION TLIMELY CAUSE OF THIS F	FAILURE MOSK-OUT OF TOLERANCE, DURING COMBINED BYSTEN TEBTS PERFORMED ON AC-6, BWITCH 33 ACTIVATED AT 43.48 SECONDS . THE EXPECTED ACTUATION THAE WAS AS SECONDS. AFTER EXTENSIVE TESTING. THE FAILURE COULD NOT BE CONFIRMED. THE MOS T LIKELY CAUSE OF THIS FAILURE WAS AN INTERNITTENT OPEN CIRCUIT SOMEWHERE IN THE BMITCH 33 CIRCUITRY AND ADJACENT WI	STA PERFORMED ON AC-6. ENSINE TESTING, THE FA ERCULT SOMEWHERE IN TH	BUITCH 33	ACTIVAT D NOT BE IS CIRCUI	TA 63 TA 7 PT	43.88 SECONDS SEMED. THE MOS ND ADJACENT WI	

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GENERAL DYNAMICS CORVAIR DIVIDION

18 204 1966	DIFFICULTIES REVIEW-AUTOFILOT BYBTEN-AIRBORNE	TOFILOT SYSTEM-AIRBOR	¥				
 SYSTEM SUB-SYSTEM	TEST/REPORT HUMBER PASIED COMPOMENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE BITE DATE DATE DATE DATE DATE	BITE TIME DIF	2 5 2 5	VENDOR NAME	
 RIME, NO OPEN CIRCUITS M	A VERE FOUND.						•
 AUTOFILOT-SALARE-A/B PROGRAMMER		FAR 69-41044-3	4504£7	FACTORY	\$ Q		-
 FAILURE MODE-ELECTRICAL FROM HI TO LOM. THE FAU TEMPERATURE FOUND. TRAM F OUTPUT FOINT BY UMISOL.	ICAL CMEN. COUNTER & CIRCUIT BOARD (PZN 68-41044-3) FAILED WHEN THE 8-7 BINARY FAILED TO SWITCH FALLET WAS TRACED TO TRANSISTOR G-42(RMEEN WAN EXABL). TRANSISTOR CASE OFFNED AND EVEDENCE OF HI TRANSISTOR FAILED BECAUSE OF EXCESSIVE CURRENT POSSIBLY CAUSED BY INADVERTANT SHORT CIRCUITING OF ISOCIAL DECOMES WEED DURING TEST.	/N 69-41044-3) FAILED HEEN L3N EXABT). TRAN CLRRENT POBSIBLY CAU T.	MEN THE STREET OF CAN	B-7 BINAL E OFENED DVERTANT	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ILED TO SULTCH EVEDENCE OF HI T CIRCUITING O	
 CORRECTIVE AFTION-ADAPT	CORRECTIVE AFTION-ADAPTERS FOR PRODUCTION AREA ORGILLOSCOPES MERE PUT INTO SERVICE ABOUT 1 MAY 1985.	PES NERE PUT INTO SER	VICE ABOUT	1 PMY 1			
 AUTOFILOT-SQUARE-A/B	A6UR3-001-37/PC-CO-01-0071-018	COMPOST TE-FACTORY	711E 6504E0		9 9	50 /C	:
 FALTURE MODE-FAILED 70 -	TO CHERATE AT PRESCRIBED TIME, GYRO BIAS MAS MISSING PRICK TO SUSTAINER CUTOFF, DITE TO PROGRAMM	IAS MAS MISSING PRICE	TO BUSTAL	MER CUTO	ě	E TO PROGRAMM	
 SYSTEM EFFECT-OPERATION DOESN'S START.	SYSTEM EFFECT-OFENATION DOESNY START.	TIME REGULATO.					······································
 CORRECTIVE ACTION-TERT	PROGRAMMER TAPES (AGE) WERE REPLACED.	.ca					
 AUTOFILOT-SAUARE-A/B PROCKAMER	SLV-08-04-5017-F CIRCUIT BOARD LOGIC-E ABBY.	FAR E7-73348-805	63041.6	FACTORY	Şõ	•	Ī
 FAILURE MODE NUT OF TOLI INSTEAD OF PLUS 40 MOC. DS OF THE TEST SET MERE LEAD MIRE TO THE RESET I	FAILURE MODE NUT OF TOLERANCE. THE LOGIC-E ASSY, MRS 1870 MMEN THE B-1 (RUM) BIMARY CIRCUIT CUTPUT MAS PLUS EO YDC INSTEAD OF PLUS 40 MDC. FAILURE AMALYSIS TESTED THE UNIT SEVERAL TIMES AND COLLD NOT MAKE PROBLEM REMEAT, ALL ES LEA DS OF THE TEST SEI MERE CHECKED FOR DISCHEPANCIES AND HOME FOUND. FAILURE POSSIBLY CAUSED BY OMISSION OF A TEST SET LEAD WIRE TO THE RESET IMPUT (PIM 201).	NACH THE B-1 (RUN) B EVERAL TIMES AND COUL FOUND, FAILURE FORB!	THARY CIRC D NOT MAKE BLY CAUSED	PROBLEM PROBLEM BY ONLS:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B PLUS EG VOC II, ALL ED LEA OF A TEST SET	
 CORRECTIVE ACTION-FAILU	CORRECTIVE ACTION-FAILURE NOT CONFINNED. PERSONNEL MERE CAUTIONED TO ALMATS DOUBLE CHECK ALL TEST EQUIPMENT CONNECT	AUTIONED TO ALMAYS DO	UBIE CHECK	ALL 760	7 60	IPHENT COMMECT	
						PAGE 0137	

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BYBTEN BUB-RYBTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIP DATA BOUNCE PART NUMBER	VEHICLE BITE PRI VENDOR MAME DATE DIF TIME DIF OTH VENDOR PART NO	7 P P P P P P P P P P P P P P P P P P P	VENDOR MAME	· · · · · · · · · · · · · · · · · · ·
AUTOFILOT-SQUARE-A/B	LV-89-04-5016-F CIRCUIT BOARD TANNISTON	FAR 27-41594-805	2250 FACTORY 650409	7 C		•
FAILURE MODE-ELECTRICAL SMORT GREEN EMAST) MAS REMONED AND BASE JUNCTION BROCE DOM AT 18 FLCTIVE, DEFECT IN THE CRUSTAL TAL, ANOTHER POSSIBLE CAUSE OF	FAILURE MODE-ELECTRICAL SMORT, THE LOGIC 3 ASSEMBLY WAS REPORTED FAILED FOR LEAKY TRANSISTORS. THE TRANSISTOR 0-13 KRHEEN EMAST) WAS REMOVED AND TESTED, THE COLLECTOR-TO-ENITTER JUNCTION INDICATED A 5GO OWN SHORT. THE COLLECTOR-TO-BASE JUNCTION BROKE DOMA IT IS WOL NATHER THAN THE EXPECTED 60 WOC. TRANSISTOR DISASSEMBLED AND THE CRYSTAL FOUND DE PECTIVE, DEFECT IN THE CRYSTAL MAY HAVE OCCUMBED DUMING BONDING BY HAT AND PRESSURE OF THE "MISTER LEAD TO THE CRYSTAL MAY HAVE COLUMBE DUMING BONDING BY HAT AND PRESSURE OF THE "MISTER LEAD TO THE CRYSTAL AND THE CAUSE OF FAILURE COLUMBE THE APPLICATION OF A HIGH-CURRENT BHORT-DUIATION PULSE.	REPORTED FAILED FOR 14 HITTER JUNCTION INDICATED TED 40 VOC. TRANSIBTOR COMDING BY HEAT AND PRE CATION OF A HIGH-CURRE	EAKY TRANSISTORS. TEO A SCO CHM SHO DISASSEMENTE 'HE ESUME OF THE 'HE ENT BHORT-DU'ATIO	THE TREET TO THE CR. TER CR. TER LE.	COLLECTOR-70- FATAL FOUND DE TO THE CRTS	ورواني والمراول والمر
CORRECTIVE ACTION-MANUF LBO RAR LV-89-04-8048 WE ALB WHEN DOMDING. TRANSI	CORRECTIVE ACTION-MAME, PERSONNEL MERE ADVIJED TO EJERCIBE EXTREME CARE MHEN TROUBLE BHOOTING MITH THE POMER ON. A LEG RAR LV-88-04-8048 MB 135MED RECOMMENDIY 6 WENDOR TAKE APPROPRIATE MEASURES TO PREVENT DAMAGE TO YRANSIBTOR CRYST ALS WHEN DOMDING. TRANSIBTOR EMIST DECLARED INJECTIVE FOR DEBIGN. NO LONGER ON OPL. NOW USE EMISS.	ISE EXTREME CARE WHEN APPROPRIATE MEASURES DESIGN. NO LONGER ON	TROUBLE SHOOTING TO PREVENT DAMAS DPL. NOW USE EMS	WITH TH	IE POMER ON. A INSISTOR CRYST	
AUTOFILOT-SQUAPE-A/B PROGRAHMER	LV-99-04-3012-P SAITCH PLIP-PLOP-TRANSISTOR	FAR 35-41840-1	1510 FACTORY 850384	2 3		•
FAILURE HODE-ELECTRICAL SHC: TREVEALED TRANSISTOR 4-16 WAS SH TO-COLLECTOR SHORT CIRCUIT, THE ED TRANSISTOR CRYSTAL.	FAILURE MODE-ELECTRICAL SMC. THE LOGIC & METHORR FAILED DURING TOP PACKAGE TESTING, TESTING AND TROUBLE SM-DOTING REVEALED TRANSISTOR 4-14 WAS SHORT CIRCUITD, 4-14 WAS MARKED 483-744MA7835 HUGHES AND MAS FOLKD TO MAYE AN ENITER-TO-COLLECTOR SHORT CIRCUIT, THE TRANSISTOR FAILURE IAS DUE TO A CURRENT OVERLOADING POSSIBLY INTENSIFIED BY A WEAKEN ED TRANSISTOR CRYSTAL.	D DURING TOP PACKAGE 1 RKED 4ES-744HA7855 HK R TO A CURRENT OWERLON	TESTING, TESTING THES AND MAS FOUN LDING POSSIBLY IN	AND TROUD TO HAVE TENSIFIE	BLE BHOOTING RE AN ENITTER- ID BY A WEAKEN	
CORRECTIVE ACTION-CIC 4 RAR LV-99-04-6048 185UE L FROM PEMETRATIME INTO	CORRECTIVE ACTION-CIC 47102 APPROVED FOR MODIFICATION OF TEST SET (P/N 27-3138) TO ADD A CURRENT-LIMITING RESISTOR. RAR LV-SP-D4-4048 ISSUED RECOMMENDING THE VENDOR IMPROVE THE TRANSISTOR ALLOTIMG PROCESA TO PREVENT ALLOTIMG MATERI AL FROM PEMETRATING INTO THE EMITTER AND COLLECTOR REGIONS.	TEST SET (P/N E7-3136 THE TRANSISTOR ALLOTIS.	I) TO ABO A CURRE	NT-LINIT EVENT AL	ING RESISTOR.	V=v
autopelot-balare-a/B Programer	69C34E1 CIRCUIT BOARD	UTP-9LT 81-34C04-0ES	450303 60/C	ž Q		059760
FAILURE HODE-FAILURE DU Hor on Azai Losic Board Refer to Failure Los Mu	DURING OPERATION-DURING BLT Z-AKIB VIBRATION (R/S) ERRATIC SMITCHING OCCURRED DUE TO C-S CAPAC RD DAEAKING FREE OF BOARD DUE TO BEPARATION OF EPORY BOND BETWEEK CIRCUIT BOARD AND CAPACITOR. MUNDER 558-3-DIB.	VIBRATION (R/S) ERRATI PARATION OF EPORY BOND	IC SMITCHING OCCU	POARD A	TO C-S CAPACING.	
CORRECTIVE ACTION-AMENDMEN BATED AS CORRECTIVE ACTION.	HOMENT H DATED MARCH B1, 1962 TO PRINTED CIRCUIT BOARD PARTS ASSEMBLY SPEC NO. 0-79015 INCORPO	INTED CIRCUIT BOARS PA	ATS ASSEMBLY SPE		PB018 INCORPO	·····
autopilot-square-a/b Programmer	8LV-99-54-3006-F LOGIC-E CIRCUITBOARD-DIODE	東京部 東京和 東京和	650226 FACTORY	200		
FAILURE MODE-OUT OF TOLI . REPORTED FAILURE TRACE	CLEBANCE. THE LOGIC-E ABBY, MAB (R/D POR A PLUB AD VDC OUTPUT MHEN A 15 TO 26 VDC MAB EXPECTED (CED TO DIODE CR-E (P/M 87-18017-DDE) MHICH MAD A BLOM RECOVERY TIME-WHICH ALLONED THE 31 (RUM)	B POR A PLUS 4D VDC OL HHICH HAD A BLOW REC	JPUT MEN A 18 TO	ALLONED	THE DE CRUM)	
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GENERAL DYNAHICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

GENERAL DYNAMICS CONVAIR DIVISION

THINGS THE THE THEORY TO THE THEORY THE THEORY THE THEORY THE THEORY THEORY THE THEORY THEORY THE THEORY TH		DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥		r
SAUTCH EI	STATEM CUB-STATEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER		# 5 # 2	
RE DARING ONE STORY DATE TO THE TEMPERATURE ALTITUDE VIBRATION, SWITCH EI WAS IN HIGH STATEMENT OF VIBRATION BEEF, SWITCH EI SMOALD MAYE BEEN IN LON STATE (ZERO VOC.), REYER TO FAILURE LOS WASHINGS BEEFER TO FAILURE LOS WASHINGS BEIGHT OF VIBRATION TEST (100 CPS PORTION WITHINGS, PROBABLE CLUSE OF PROBLEM IN TEST EQUIPMENT. RELAT R-35 REL	AUTOPILOT-BRUARE-A/B PROGRAMMER	SPCESST.R SWITCH RE	UTP-PRT 69-41001-671		YES NO	•
HELAY R-35 BE-73801-DID BELAY R-35 BELAY BEER TO ZERO TIME. BELAY R-35 WAS POAND TO HAVE WORN FIVOT POINTS. REFER TO RESERVED TO OFFER TO ZERO TIME. BELAY RELAY ON AN URGENT UREACHY POINTS. REFER TO COMPOSITE REW RELAY ON AN URGENT UREACHY POINTS. REFER TO COMPOSITE REW RELAY ON AN URGENT UREACHY HAD DAGOPED TO COMPOSITE REW RELAY ON AN URGENT UREACHY HAD DAGOPED THE OFFER TO COMPOSITE REW RELAY OF AN URBENT WAS DAGOPED THE OFFER TO COMPOSITE REWELL TO COMPOSITE REMAINS THE DAGOPED THE OFFER TO COMPOSITE REMED. BELAY R-35 BELAY R-35 BELAY R-35 BELAY WORNER TO START. PROGRAMMENT PROCRAMMEN RESET WAS 35HT WHEN POACH WAD THE INFO THE		MING OPERATION. DURING PRT Z-AKIS TE BRATION SHEEP. SWITCH RI SHOULD HAVE	MPCRATURE-ALTITUDE- BEEN IN LOW BTATE	FIBRATION, BUITCH (ZERO VDC). REFER	II MAS IN HIGH STAT TO FAILURE LOG NUMB	
RELAY R-35 BG-73801-010 RELAY R-35 RELAY RELAY RELAY RECOMED 10 WOT STROIT THE DURING PAT Y-AXIS TEMPERATURE—ALTITUDE—VIRBATION, HIGH POWER BW RS 354-3-007. R 354-	CORRECTIVE ACTION-FAILU	RE COULD NOT BE CONFIRMED. TEAR DOWN NG. PROBABLE CAUSE OF PROBAED IN TEA	INSPECTION AND REP T EQUIPMENT.	EAT OF VIBRATION TI	187 (100 CPS PORTIO	
15) EO AND EL DID NOT RESET TO ZENO TIME. DURING PRIT X-AXIS TEMPERATURE-ALTITUDE-VIBRATION, HIGH POWER BY 254-3-007. A 554-3-007. A AAS-DOOT. AAAS-DOOT. AAAAS-DOOT. AAAAS-DOOT. AAAAS-DOOT. AAAAAS-DOOT. AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	AUTOFILOT-SOURE-A/B PROGRAMER	69CE687.2 Relay R-35	UTP-PRT 86-73801-010			***
ECF FOR REDESIGN OF CIRCUIT BOARD TO INCORPORATE NEW RELAY ON AN URGENT (RENORM) BASIS TO BE SUBNIT OFFER TO STATE OF ST	FAILURE MODE-FAILURE TO ITCHES 12, 13, 14, 19, E O FAILURE LOS MURBER 558	OPERATE AT PRESCRIBED TIME- DURING 13 AND E1 DID NOT RESET TO ZERO TIME.	PRT X-AXIS TEMPERAT RELAT R-35 WAS FOU	ME-ALTITUDE-VIBRA' O TO MAVE MORN PII	TION, MIGH POWER SW FOT POINTS, REFER T	
AAAS-DOIR/PA-TCD-DI-5301 COMPOSITE-8 FACT 5301 14 YES RELAY TO OPERATE AT PRESCRIBED TIME. A PERNANENT PROGRAMMER RESET WAS SENT WHEN POWER WAS TRANSFERRED T EVENTED ARMING THE PROGRAMMER, INVESTIGATION REVEALED THE 115V VOLTAGE SENSING RELAY HAD DATOPPED THAG OF 400 CYCLE GACHAD AND 400 CYCLE INVESTER POWER A MODULATED BIGHAL INTO THE INF ATION DOES NOT START. PROGRAMMER COLLD NOT BE ARMED. MODAN. SECONDENDED ISOLATION OF 400 CYCLE GACHAD FOMER AND 400 CYCLE INVESTER POWER. SECONDENDED ISOLATION OF 400 CYCLE GACHAD FOMER AND 400 CYCLE INVESTER POWER. SECONDENDED ISOLATION OF AND CYCLE GACHAD FOMER AND 400 CYCLE INVESTER POWER. SECONDENDED ISOLATION OF AND TANTALUM- 81-54900-037 HOLD PARSSB -ELECTRIC-ON RERUN OF PRT Y-AXIB, TEMPERATURE-ALTITUDE-VIBRATION (8/8), 59-41001-903 PROGRAMMER B MALFUNCTIONED DUE TO INTERMITTENT SHORTING OF BOARD ANAL OF POWER BUPPLY MODULE. CAU HIGH THE SIBE OF THE CAPACITOR. REFER TO FAILURE LOB MUMBER BSB-3-008.	CORRECTIVE ACTION-ECP F	OR REDESIGN OF CIRCUIT BOARD TO INCO	RPORATE NEW RELAY O	H AN URGENT (REMORI	() BASIS TO BE SUBM	
FAILURE MODE-TAIL TO OPERATE AT PRESCRIBED TINE, A PERMANENT PROGRAMMER RESET WAS SENT WHEN POMER WAS TRANSFRRED TO INTERNAL. THIS PREVENTED ARRING THE PROGRAMMER, INVESTIGATION REVEALED THE 115W VOLTAGE SENSING RELAY MAD DAGGPED OUT DUE TO HISMATCHING OF 400 CYCLE GROUND AND CYCLE INVENTER POMER WHICH CAUSED A MODULATED BIGHAL INTO THE INPERITURE TO HISMATCHING OF AND START. PROGRAMMER COULD NOT BE ARMED. WEMICLE EFFECT-OPERATION DOES NOT START. PROGRAMMER COULD NOT BE ARMED. VEHICLE EFFECT-UNKNOWN. CORRECTIVE ACTION-RECOMBENDED ISOLATION OF 400 CYCLE GROUND POMER AND CYCLE INVERTER POMER. AUTOFILOT-SHUMBER ACTION-RECOMBENDED ISOLATION OF 400 CYCLE GROUND POMER AND CYCLE INVERTER POMER. AUTOFILOT-SHUMBER ACTION-RECOMBENDED ISOLATION OF PRIT Y-AXIS, TEMPERATURE-ALTITUDE-VIBRATION (A/S), 59-41001-803 PROGRAMMER BID MADELY MODULE. CAUSED BY A BLUE BROKEN OFF THE DISC OF THE CAPACITOR. REFER TO FAILURE LOB WHMBER BID-3-DOR. PAGE DIAL	AUTOPILOT - SQUARE - A/B PROGRAMER	AA65-0012/P4-7CD-01-5301 RELAY	COMPOSITE-B PACT	2	YES NO	395040
WENTELE EFFECT-OFFERATION DOES NOT START. PROGRAMMER COULD NOT BE ARMED. VEHICLE EFFECT-OFFERATION DOES NOT START. PROGRAMMER COULD NOT BE ARMED. CORRECTIVE ACTION-RECOMMENDED ISOLATION OF 400 CYCLE GROUND POMER AND 400 CYCLE INVERTER POMER. AUTOPILOT-SQUARE-A/B 89-C3421 FROGRAMMER CIRCUIT BOARD-CAPACITOR -TANTALUM- 81-349-00-037 FAILURE MODE-SHORT-ELECTRIC-ON RERUN OF PRT Y-AXIS, TEMPERATURE-ALTITUDE-VIBRATION (8/8), 59-41001-903 PROGRAMMER B MITCHING FUNCTIONS NALFUNCTIONED DUE TO INTERHITTENT SHORTING OF CAPACITOR ON BOARD ATAL OF POWER SUPPLY WOOLLE. CAU BED BY A BLUG BROKEN OFF THE CAPACITOR. REFER TO FAILURE LOG HUMBER BSS-3-DOR.	FAILURE MODE-FAIL TO OP O INTERNAL. THIS PREVENT OUT DUE TO MISMATCHING OF UT OF THE VSR.	ERATE AT PRESCRIBED TIME, A PERMANEN ED ARMING THE PROCRAMER, INVESTIGAT 8º 400 CYCLE GROUND AND 400 CYCLE INV	T PROGRAIGHER RESET ION REVEALED THE 13 ERTER POMER WHICH C	AB SENT WEN POAE! 3V VOLTAGE SENSING 1USED A MODULATED !	NAB TRANSFERRED T RELAY HAD DROPPED LIGHAL INTO THE IMP	
VENICLE EFFECT-UNKNOWN. CORRECTIVE ACTION-RECOMBENDED ISOLATION OF 400 CYCLE GROUND POWER AND 400 CYCLE INVERTER POMER. AUTOPILOT-SQUARE—A/B 60-5421 PROGRAMMER CIRCUIT BOARD-CAPACITOR -TANTALUM- 01-34000-037 PAILURE MODE-SHORT-ELECTRIC-ON RERUN OF PRT Y-AKIS, TEMPERATURE-ALTITUDE-VIBRATION (R/S), 55-41001-003 PROGRAMMER BED BY A BLUE BROKEN OF THE CAPACITOR, REFER TO FAILURE LOS MUMBER BSS-3-508. PASE DET A BLUE BROKEN OFF THE SISC OF THE CAPACITOR, REFER TO FAILURE LOS MUMBER BSS-3-508.	BYSTEN EFFECT-OFERATION	DOES NOT START. PROGRAMMER COALD NO	T BE ARMED.			
CORRECTIVE ACTION-RECOMMENDED ISOLATION OF 400 CYCLE GNOMD POMER AND 400 CYCLE INVERTER POMER. AUTOFILOT-SQUARE—A/B 48-53421 FROGAZAMMER CIRCUIT BOARD—CAPACITOR -TANTALUM- 81-34900-037 FAILURE MODE—SMORT-ELECTRIC-ON RERUM OF PRT Y-AKIS, TEMPERATURE-ALTITUDE-VIBRATION (M/S), 55-41001-803 PROGRAMMER SUTCHING FUNCTIONS MALFUMCTIONED DUE TO INTEPHITTENT SHORTING OF CAPACITOR ON BOARD ATAL OF POMER SUPPLY MODULE. CAU MED BY A BLUE BROKEN OFF THE SIBC OF THE CAPACITOR. REFER TO FAILURE LOG MUNBER BSS-3-00R.	WENTELE EFFECT-UNKNOWN.					
AUTOPILOT-BRUARE-A/B 89-C3421 PROGRAMMER CIRCUIT BOARD-CAPACITOR -TANTALUM- 81-34900-037 PAILURE MODE-SHORT-ELECTRIC-ON RERUN OF PRT Y-AKIS, TEMPERATURE-ALTITUDE-VIBRATION (R/S), 55-41001-903 PROGRAMMER S WITCHING FUNCTIONS MALFUNCTIONED DUE TO INTEPHITTENT SHORTING COPPAGE 888-3-508. PASE BY A BLUE BROAKN OF THE CAPACITOR, REFER TO FAILURE LOS WUMBER 888-3-508.	CORRECTIVE ACTION-RECOM	ð	POWER AND 400 CYCL	INVERTER POMER.	e, degles despressibilitation of the control of the	•
PAILURE MODE-SHORT-ELECTRIC-ON RERUN OF PRI Y-AXIS, TEMPERATURE-ALTITUDE-VIBRATION (8/8), 55-41001-803 PROGRAMMER & UITCHING FUNCTIONS MALFUNCTIONED DUE TO INTEPHITTENT SHORTING OF CAPACITOR ON BOARD ATAL OF POWER BUPPLY MODULE. CAUSED BY A BLUE BROKEN OFF THE SIBC OF THE CAPACITOR, REFER TO FAILURE LOS MUMBER BSS-3-502.	AUTOFILOT-BRUARE-A/B PROGRAMER	69C34E1 CIRCUIT BOARD-CAPACITOR -TANTALUM-	UTP-PRT 61-34900-037			
PA6E 0141	FAILURE MODE-SMORT-ELECT WITCHING FUNCTIONS MALFUN MED BY A BLUG BROKEN OFF	TRIC-ON RERUM OF PRT Y-AKIB, TEMPERA WCTIOMED DUE TO INTEPHITTENT SHORTIN THE DISC OF THE CAPACITOR, REFER TO	TURE-ALTITUDE-VIBRA B.OF. CAPACITOR ON B. FAILURE LOG HUMBER	IION (R/B) : 59-4100 ARD A7A1 OF POMER BBB-B-DOR.	11-803 PROGRAMMER S SUPPLY MODULE, CAU	····
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AINBORNE

FAILED COMPOSENT NAME PART MUNSER DATE DIF THE DIP OTH VENDOR PART MOSE ASSURE TALE DIF OTH VENDOR PART MOSE ASSURE TALED DISITAL CIRCUITS TO SPRAGUE (VENDOR) SLY-SS-04-488E* FAR ET-73348-808 650118 TO SPRAGUE (VENDOR) OF TOLERANCE. UNIT REJECTED FOR HIGH OUTPUT VOLTAGE. HOME, FAILURE HOT COMPIRMED. 66534E1 60/C YES 177
OCRAMMER CRITICAL DIGITAL CIRC 7-73348-803 350118 7AC 7-73348-803 850118 7AC VOLTAGE.
3302 603 650116 641215
stata
641213
61-34900-037
FAILURE MODE-SHORT-O'TETRIC-DURING PRI Y-AXIB TEMPERATURE-ALFITUDE-VIBRATION (R/B) 95-41001-903 PROCRAMER SMITCHIN 6 FUNCTIONS MALFUNCTIONED DUE TO INTERHITTENT SHORTING OF CAPACITOR ON BOMRD A741 OF FOMER SUPPLY MODULE CAUSED BY A BLUG BROKEN OFF THE DIS. OF THE CAPACITOR, REFER TO FAIL ME LOG MANBER 838-3-001.
CORRECTIVE ACTION-ECP 3440 HAS BEEN APPROVED MICH CHANGED PROGRAMMER CRITICAL DIGITAL CIACUITS TO SPRAGUE (VENDOR) ONLY CAPACITORS.
FAR 8412 FACTORY 27-45849-9
FAILU'E MODE-ERRATIC OPERATION, TRANSIENT VOLTAGES MERE GENERATED IN THE ASSEMBLY, MAILE BEING VIBRATED SEPARATELY, CAUSING MAILE BEING VIBRATED SEPARATELY, CAUSING THE "ACCRAMMER TO RESET, NO DISCREPANCIES COULD BE FOUND IN THE UNIT, ADDITIONAL TESTING MAILE BEING VIBRATED TO MAYE ORIGINATED IN THE TEST EQUIPMENT, CONTINED TO MAYE ORIGINATED IN
FAR 8501 ETA 69-41001-973 641211
', ELECTRICAL, NO GUTPUT AT THE LOW POWER BUITCHES. THIS MAS CAUSED BY THE PLUS 14 VOLT D-C SUPPLY 1555 TO THE HIMUS 14 VOLT D-C SUPPLY 11555 TO THE HIMUS 14 VOLT D-C SUPPLY TO THE PROGRAMMER. THIS WAS CAUSED BY A SHORT CIRCUITED TRANSTINCUITET, THE TRANSISTOR MAS DAMAGED MENT THE 28 VOLT D-C OUT PUT OF SWITCH 11 WAS ERROMEOUSLY COPICY OF SWITCH 1 DAG TEST BET WITHE ERROR.

13 JUN 1966

SENEN. DYMANICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	
DIFFICULTIES	

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£ 8					2
VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	NOT RECUR. ALSO A NEW PATC NOT BE NECESSARY. ON DECEM CORRECTED BY THEM.	ILUME IMB	60/c	NY YES NO RATE UNDER NO-LOAD. IT SPECIFICATION REM	40/c
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CESSA CESSA	8 3 3 6 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8	9	YES NO UNDER ECIFIC	\$ 9.2
SITE DIF	NOT RECUR	FACTORY Y MAID TO PAI TESTING AN	ETR N-1EDOO N	FACTORY PO OPERATE OF MARKE	* *
VEHICLE DATE DIF	RROR WILL TONS WILL HAS BEEN	SADE F SALEOT INCUIT BOA SSEMBLY, T	441E04	FALLED TO FALLED TO FR DID MOT ACCEPTAVCE	941116 941116
DIF DATA BOUNCE	EQUIPHENT WIRING ET HER VIRE MODIFICATI	FAR 118 HENT ABAGHBLY CI ERMINED. EATER CARE DURING AN	SS-4450E ON BIGNAL (BECO) COL	FAR E7-41639-5 KOUT WHEN SWITCH 13 TIFIER. THE RECTIFIE REVISED TO PREVENT A	AC10F
TEST/REPORT NUMBER FAILED COMPONENT NAME	CORRECTIVE ACTION-DEBIGH HAVE TAKEN BIEFB TO ABBURE THE TEST EQUIPHENT WIRING ERROR WILL NOT RECUR. ALSO A HEBOARD, R7-45860-837, IS BEING FABRICATED FOR ETR BO THAT JUNPER WIRE MODIFICATIONS WILL NOT BE NECESBARY. BER 15, 1964 ETR PERSONMEL WERE INFORMED OF THIS ANALYSIS. THE JUNPER WIRE ERROR HAS BEEN CORRECTED BY THEM.	TOPILOT-BQUARE-A/B 3LY-88-04-4873F FAR 53DE FACTORY YES OGRAMMER CIRCUIT BOARD-DIODE 27-41488-1 641E07 NO FAILURE HODE-ELECTRICAL SHORT, UNIT REJECTED WHEN 17 CAUSED 178 NEXT ABAEMBLY CIRCUIT BOARD TO FAIL, FAILURE WAS THE RESULT OF A SHORTED DIODE, CAUSE FOR MHICH COULD NOT BE DETERMINED. CORRECTIVE ACTION-FACTORY PERSONNEL NERE CAUTIONED TO USE GREATER CARE DURING ABSENDLY, TESTING AND INSPECTION.	CAPANIE-D89/P8-LD-01-04C4 HARNESS NE CPERATION, AUTOFILOT FUEL DEPLETI SCRETE SIGNALS, AUTOFILOT FUEL DEPL HEWIURE SUSTAINER ENGINE SHUTDOMN, NAS REROUTED TO A SPARE CONDUCTOR.	SLV-89-04-4989F CIRCUIT BOARD-RECTIFIER IFICATION, UNIT REJECTED DURING CHEC TO A MARETMAL SILICON CONTROLLED REC THE INSPECTION TEST PROCEDURES HERE	TOUTLOT-BRUARE-A/B 60/AAGU83-GDI-ET/FC-CO-GI-GO71-GG7 COMPOSITE-FACTOF GGRANMER 88-41601-871 FAILURE MODE-FAIL DURING OPERATION, PITCH PROGRAM PROFILE MAS MOIST. SYSTEM EFFECT-ERRATIC OPERATION.
#37878 #37878 #18-87878#	CORRECTIVE ACTION-DESIGN H BOARD, E7-45660-637, 18 BER 15, 1964 ETR PERSONGE	AUTOFILOT-BAUARE-A/B PROGRAMER FAILURE MODE-ELECTRICAL 1 E RESULT OF A SHORTED DIGG CORRECTIVE ACTION-FACTORY	PROGRAMER PROGRAMER FAILURE HODE-FAIL TO CEAS M 63E HARNESS 55-6450E. SYSTEM EFFECT-IMPROPER DI WEHICLE EFFECT-POSSIBLE F CORRECTIVE ACTION-SIGNAL	PROGRAMMENT - SQUARE - A/B PROGRAMMEN FAILURE MODE - OUT OF SA/CI E FAILURE MAS ATTRIBUTED EMENTS. CGRECTIVE ACTION-RECEIVE	AUTOPILOT-BOURRE-A/B PROGRAMMER FAILURE MODE-PAIL DURING SYDTEM EFFECT-ERRATIC OF

CONVAIR DIVISION

18 JUN 1566

DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORNE

BUB-BYBIEK	TEST/REPORT NUMBER FAILED COMPONENT MANE	DIF DATA SOURCE	VEHICLE S	ME DIF OTH	VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	
177	SIGNAL ISOLATION AMPLIFIER WAS REPLACED.	LACED.				*****
PROGRAMMER FROGRAMMER FRICHE WODE-ERRATIC OP- WITCHES 8-10-31- AND 3E TRANSISTOR IN THE PROGRA	FAM 641027 FACTORY NO SMITCH BAILTON B	FAN 53-41001-901 181LITY PORTION OF EL THE ERRATIC SWITCHES E FAULTY TRANSISTOR I	6410ET FAC ECTRO MAGNETIC MAS COFFIRMED.	FACTORY NO	CE TESTIME, S E TO A FALLTY THE ESKYTIC	
CCRRECTIVE ACTION-NO CO NED TO INSURE THE ADEQUA AUTOFILOT-SQUARE-A/B PROGRAINER FAILUKE HODE-STRUCTURAL ROBABLE CAUSE WAS A CRAC	CORRECTIVE ACTION-NO CORP.CTIVE ACTION. IT IS RECOMMENDED THAT A DESIGN REVIEW ON THE PROGRAMMER TEST SET BE PERFORMULE THE ADEQUACY OF THE DESIGN AND THE COMPATIBILITY OF THE TEST SET TO ALL EXPECTED ENVIRONMENTS. UTOPILOT-SQUARE-A/B SLV-99-D4-4943F FAR 641DE4 FACTORY YES BINARY CINCUIT BOAND DIODE 87-41498-1 BINARY CINCUIT BOAND DIODE 87-41498-1 FAILURE MODE-STRUCTURAL. RESISTANCE DETWEEN PINS 5 AND 1 OF 9-3 KILOHMS IS NIGH- MAXIMUM ALLO-ED IS 8-14 KILOHMS. PROGRAME CAUSE WAS A CRACKED DIGGE. DIODE PROGRAMY WAS CRACKED DIGGE. DIODE PROGRAMY WAS CRACKED DIGGE.	COMENDED THAT A DESIGN REVIEW ON THE PROCRAMER TEST SET BE PERFORM COMPATIBILITY OF THE TEST SET TO ALL EXPECTED ENVIRONMENTS. FAR 6410E4 FACTORY YES NO. 87-41498-1 NO. 8 AND 1 OF 8-3 KILCHHS IS HIGH: MAXIMUM ALLOYED IS 8-14 KILCHHS. P. MAS CRACKED DURING POTTING.	DESIGN REVIEW ON THE PROCRAMER TEST SET B THE TEST SET TO ALL EXPECTED ENVIRONMENTS. 6410E4 FACTORY YES 498-1 HGH, MAXIMUM ALLO/ED IS 8.14 KI	PACTORY YES FACTORY YES FACTORY YES FOLKASE FO	SET BE PERFOR	75020
CDRRECTIVE ACTION-A FAC. AUTOFILOT-SQUARE-A/B PRO/AANWER FAILURE MODE-OUT OF TOL		MGE APPARENTLY OF THIS FAILURE FAR E7-41498-1 OF 18 KILCHMS (20.34 WINIMUM RE	AND FURNISHED 441020 FAC 641020 PAC 6UIRED) DURING	ED ILLUSTRATIME FACTORY YES 60C NO HING POST COFFORM	IE PHOTOGRAPHS IDC	5
LECTRICAL TESTS. FAILUR CORRECTIVE ACTICM-AN AN IN ANSWER TO RAR BLV-9 WERE REQUESTED TO VERIF BY QC DUE TO SHORTAGE O	ELECTRICAL TESTS. FAILURE IS ATTRIBUTED USE OF A MOUNT VALUE RESISTOR. CORRECTIVE ACTION-AN ANALYSIS TEST MAS MADE INDICATING THAT THE FAILED UNIT WAS NOT TESTED AT THE PRE-POTTING LEVEL. IN ANSHER TO AAR BLY-SP-D4-SPS TEST WE OPERATORS WERE ALERTED TO THE POSSIBILITY OF THIS TYPE OF DISCREPANCY AND MER REQUESTED TO VERIFY THAT EACH UNIT IS TESTED BEFORE PAPER WORN IS HITTALED. THE FIRST TESTS ARE NOT MONITORED BY GO DUE TO SHORTSKANSHIP.	HAT THE FAILED UNIT N ALERTED TO THE POSSI PAPER WORN IS SHITLED TO INDICATE GOOD OF	AS NOT TESTED BILLITY OF THIS LED. THE FIRST AFTSMANSHIP.	AT THE PRE- TYPE OF D TESTS ARE	POTTING LEVEL ISCREPANCY AND NOT NOWITORED	
AUTOFILOT-SGUARE-A/B PROGRAMMER FAILURE MODE-ERRATIC OF DISCREPANCIES FOUND ARE BENBLY FOUR BOCACTS &A WE	FOREIGNT-SQUARE-A/B LV-88-D4-4810F FOR PAR 27-41001-843 841015 NO NO CGRAMMER 27-41001-843 841015 NO NO CGRAMMER NO CGRAMMER 27-41001-843 841015 NO NO NO NO CGRAMMER NO CGRAMMER NO CGRAMMER NO CGRAMMER NO CAUSE NOT RNOMM. PAILURE MODE MODE AND HIGH POWER SWITCHES OCCASIONALLY CAME ON WITH POWER MOMENTARILY OFF. AT DISAS CAUSE FOUND ARE-LOW POWER AND HIGH POWER SWITCHES OCCASIONALLY CAME ON WITH POWER MOMENTARILY OFF. OWE CAUSELY FOUR SOCKETS SAVE ERRATIC RESISTANCE, TWO CONTAINED CONTAMINANTS, OWE HAD SURN MARKS ON THE SPRING CLIP. OWE PAGE TO CHAMMER AND SURN MARKS ON THE SPRING CLIP. OWE	PAR 27-41001-643 COMTINUED AFTER ZERO 1 CONTAMINANTS, CAME P	ESSO ETR SA1015 IME LITE MAS P NY WITH POWER W IAD BURN MARKS.	YES 60% NO NO NO NESENT. CAUSE COMENTABLY OF	MOF. AT DIAM. OFF. AT DIAM. ING CLIF. OWE	

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	VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	F. TWO CAPACITORS DISPLAYED 881430 E1 MAS OPEN CIRCUITED. MALYSIS.	ETR YES 60/C 887782	7, GUID EMBLE, AND THE D.2 RAMER CLOCK MAS AT ZERO. L INDICATIONS WERE THAT POMER		15, AND X-RAY OF SPLICES WA	FACTORY YES GOC DEEGE	CHARLE VALUE IS E4.66 KILCH OF NORMAL, EXACT CAUSE OF	THE POSSIBILITY OF THIS TYPAPERWORK SINCE FIRST TESTS DED DUE TO SHORTAGE OF INSPINOUETED THAT THE FAILED	ETR YES 60/C	PROGRAMMER FOR NO APPARENT NE NOT NOOM, NALLY SIE REVE
RBORNE		S OF CONTINUES SOCKET ATSEPT. OUND IN THIS A	CT E880 641013	BIAS, SMITCH HOUGH THE PROC EARLIER, AND	,	HARMESSES, PLL	1940	1 KILOHM3. ALL 13 16.5 PERCENT	RE ALERTED TO THEY OK THE F EST WAS SUSPEN AMALYSTS TEST	21018	CAUSE OF FALLS
TOPILOT SYSTEM-AL	DIF DATA SOURCE PART NUMBER	TANDS WITH NO LOS THIS FAILURE IF DISCREPANCIES PA	COMPOSITE-8 FACT	I. VERNIER ENGINE BE ACTIVATED ALT I ZERO 15 MINUTES		TION OF AIRBORNE	1-06414-VA	19 S AND 8 OF RE.	SET OPERATORS NE. 18 TESTED BEFORE ING ELECTRICAL TI NORRNAMSHIP. AN	FAR E7-41001-643	CHEINE CUTOFF WAS NOT BE REPEATED.
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	TEST/REPORT NUMBER FAILED COMPONENT NAME	LIF SHOWED SCORE MARRS, MIRES TO TWO JOINTS HAD BROKEN STRANDS WITH NO LOSS OF CONTINUITY. TWO CAPACITORS DISPLAYED MINUTE NON NETALLIC CONTAMINANT, SPECIAL TESTS DUP. ICATED THIS FAILURE IF SOCKET AFAIP!- 21 MAS OPEN CIRCUITED. CORRECTIVE ACTION-MANUFACTURING PERSCHAEL NERE INFORMED OF DISCREPANCIES FOUND IN THIS ANALYSIS.	F14849£/FE-4CG-01-288	FAILURE MODE-ERRATIC OPFRATION, DURING PREP TESTS SMITCH 4, VERNIER ENGINE BIAS, SMITCH 7, GUID ENABLE, AND THE D.2 Volt step (sust phase) of the Pitch program mere found to be activated although the programmer clock was at zero. L Andline recordings indicated a momentary loss of programmer zero is hinutes earlier, and indications here that pomer Had been interruped only to the programmer.	ISCRETE SIGNALS.	WEMICLE EFFECT-NOME. CORRECTIVE ACTION-PROGRAMMER REPLACED. COMPLETE INVESTIGATION OF AIRBORNE MARKESSES, PLUGS, AND X-RAY OF SPLICES WA	LY-59-D4-4932F BIXARY CIRCUIT BOARD	TOLERANCE. HIGH RESISTANCE BETWEEN PINS & AND & OF R6.1 KILCHMS. ALLOMBLE VALUE IS 24.68 KILCH Huted to a plus or mimus 5 percent resistor Reading Plus 16.5 percent of Normal. Exact cause of	CORRECTIVE ACTION-CONFIRMED. HER RAR SLV-99-04-3985, TEST SET OPERATORS MERE ALERTED TO THE POSSIBILITY OF THIS TYP E OF DISCREPANCIES AND WERE REQUESTED TO BE SURE EACH UNIT IS TESTED BEFORE THEY OR THE PAPERWORK SINCE FIRST TESTS ARE NOT MONITORED BY INSPECTION. INSPECTION OF THE PRE-POTTING ELECTRICAL TEST WAS SUSPENDED DUE TO SHORTAGE OF INSPECTORS. A CRAFTSMAN SHIP STAMP IS NOW USED TO MAINTAIN GOOD WORRMANSHIP. AN ANALYSIS TEST INDICATED THAT THE FAILED UNITS HERE NOT TESTED AT THE PRICED.	LV-98-04-4918F	FATURE HODE- PREMATURE OPERATION, COMMAND FOR BUSTAINER ENGINE CUIOFF WAS GIVEN BY THE PROGRAMMER FOR NO APPARENT Reason, The Zero Time Light also men out, symptom a could by De Repeated account of Fature and Known, analysis Reve
9961 WAT #1	878TEH 848-878TEH	CLIP SHOWED SCORE MARKS. I HINUTE HON METALLIC CONT.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-ERRATIC OPFRATION, DURING PREP VOLT STEP (SUST PHASE) G. THE PITCH PROGRAM I ANDLINE RECORDINGS INDICALD A MOMENIARY LOSS HAD BEEN INTERRUTED ONLY TO THE PROGRAMMER.	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS.	CORRECTIVE ACTION-PROGRAM	AUTOFILOT - SQUAPE - A/B	FAILURE MODE-OUT OF TOLES MS. FAILURE IS ATTRIBUTED FAILURE IS UNEMORN.	CORRECTIVE ACTION-CONFIRMED. HER RAR SLV-99-DA- E OF DISCREPANCIES AND WERE REQUESTED TO BE SURI ARE NOT MONITORED BY INSPECTION. INSPECTION OF ECTORS. A CRAFTSMAN SMIP STANF IS NOW USED TO W UNITS MERE NOT TESTED AT THE PRE-POTTING LEVEL.	AUTOFILOT - BEUARE - A/B PROCRAMER	FATCHE MODE. PREMATURE C NEASON, THE ZENO TIME LIFE

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GENERAL DYNAHICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

PRI VENDOR NAME OTH VENDOR PART NO	GREATER CA 880783	001408	FOUND TO C TO-COLLECTO AMMÉED BY H ROBABLY OR!	TO ELININA		ETIC INTERF ERATED CARA	O INSURE TH	***	ON. THERE W	DVISED TO CHE THIS AMLYSIS	
817E	IE REGUESTED TO TAKE	FACTORY YES	1993-1, 3/N ZD) WAS CIRCUITED ENITER- TRANSISTORS NERE DI HOMEN, THE FAILURE PI	ST SET BE EVALUATED	FACTORY NO	M OF AM ELECTROMAGN 9, 10, 31 AND 3E OFF	TE'T SET BE MADE TO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IAK VALVE DID HOT BLI LURKED-OPEN BRIDGE W	FERSONNEL NERE ADV I MAS INFORMED OF TH	
DIF DATA SOURCE VEHICLE	HIB ANALYSIS AND MER	FAR 641039	BOARD ABAI (P/N E7-7 41233 MAB POUND SHORT 19E TO COLLECTOR, THE 5T UMED IN THE PROGRA	RCUIT BG.RD LEVEL TE	FAR 641009 55-41001-901	JUSCEPTIBILITY PORTIC TYCLE HATE, BMITCHES TEST SET,	THAT A DESIGN REVIEW OF THE TE'T SET BG MAI THE TEST SET TO ALL EXPECTED ENVIRONMENTS.	FAR 3530 87-78578-5 841008	FUSES IN THE JIES CO. IS ATTRIBUTED TO A S	BE NOT KNOWN, FACTORY AROUND REALBTOR. WTO	
	5		FAILURE MODE-SMCRT (ELECT), DURING THE FAILURE ANALYBIB, CIRCUIT BOARD ABAI (P/N 27-71985-1, 3/N 2D) MAS FOUND TO CONTAIN THO SMCRT-CIRCUITED HAINSINGRS, TRANSISTOR 6-11, SMCRY ENIZSS WAS FOUND BHORT CIRCUITED ENITER-TO-COLLECTO TAINSISTOR 6-12, RAYTHEON ENST WAS FOUND SHORT-CIRCUITED BASE TO COLLECTOR, THE TRANSISTORS MERE DAMAGED BY N YOUTAGE APPLIED TO THE CHECUIT GOARD, BINCE THIS CIRCUIT IS NOT USED IN THE PROGRAMMER, THE FAILURE PROBABLY ORE GINATED IN A CIRCUIT-BOARD LEVEL TEST.	CCRRECTIVE ACTION-NO CORRECTIVE ACTION. 17 IS RECOMMENDED THAT CIRCUIT BG.RD LEVEL TEST SET BE EVALUATED TO ELIMINA E POSSIBLE CAUSES OF OVERVOLTAGING.	# - en	FAILURE MODE-EKRATIC OPEXATION. DURING PERFORMANCE OF THE AUDIO SUSCEPTIBILITY PORTION OF AN ELECTROMAGNETIC INTERF ERENCE TEST, THE ZERO-TIME INDICATION CYCLED ON AND OFF AT A TNO-CYCLE NATE. SMITCHES 9, 10, 31 AND 32 OPERATED ERRA TICALLY, THE FAILURE WAS CONFIRMED AND MAS CAUSED BY A DEPECTIVE TEST SET.	CORRECTIVE ACTION-NO CORRECTIVE ACTION. IT IS RECOMMENDED THAT A DESIGN REVIEW OF THE TE'T SET BE MADE TO INSURE ADEQUACY OF THE TEST SET DESIGN AND THE COMPATIBILITY OF THE TEST SET TO ALL EXPECTED ENVIRONMENTS.		FAILURE MODE-OPEN, ELECTRICAL, DURING PROCEDURE ET-5813E-ED THE FUSCS IN THE 1185 CONAX VALVE DID MOT BLOM, THERE M AS NO WOLTAGE OUTPUT AT PLIG USJE-PINK, SMITCH LY QUIPUT, FAILURE IS ATTRIBUTED TO A BURNED-OPEN BRIDGE WIRE AS A RE SULT OF EXCESS CURRENT FLOM, ACTUAL CAUSE NOT FOUND.	CORRECTIVE ACTION-NO CORRECTIVE ACTION TAKEN BECAUSE FAILURE CAUSE NOT KNOWN. FACTORY PERSONNEL NERE ADVISED TO CHE A EVERY BRIDGE WIRE FOR NICKE AND KINKS DEFORE INSTALLING BLEEVE AROUND RESISTOR. WIR UAS INFORMED OF THIS ANALYSIS	
TUCTARFORT NUMBER	CORRECTIVE ACTION-GOVE HANDFACTURING PERSONNEL MERE NOTIF RE IN THE CLEANING AND TESTING OF AUTOFILOT HARMESS TRAYS.	CT-99-D4-188 CIRCUIT BOARD TRANSISTOR	ICLECT), DURING THE FAI CULTED TRANSISTORS, TRA E, RATTHEON ENGST NAS F TO THE CHECUT GORD, B BOARD LEVEL TES).	CORRECTIVE ACTION. 17	CT-99~04~188 9MI TCH	C OPERATION, DURING PER D-TIME INDICATION CYCLE NAS CONFIRMED AND MAS	CORRECTIVE ACTION-NO CORRECTIVE ACTION. IT IN RECOMMENDED	LV-9D-04-4964F COMAX VALVE BMITCH	ELECTRICAL, DURING PROCEDURE ET- AT PLING USJE-PINK, BMITCH IT OU NI PLOM, ACTUAL CAUSE NOT FOUND,	CORRECTIVE ACTION TAN FOR MICKE AND KINKS OF	
XJ14X8	CORRECTIVE ACTION-66 NE IN THE CLEANING AN	AUTOPILOT-SQUARE-A/B	FAILURE MODE-SMCRT (ELECT), DURING THE OMTAIN TWO SMORT-CIRCULTED TRANSLESTORS. I AMD TRANSLESTORS G.1E, RATHEON ENGST NOT ME CHACULT GOALD SINATED IN A CIRCULT-BOARD LEVEL TEST.	CCRRECTIVE ACTION-NC TE POSSIBLE CAUSES OF	AUTOFILOT-SQUARE-A/B	FAILURE MODE-EKRATIC ERENCE TEST, THE ZERG TICALLY, THE FAILURE	CORRECTIVE ACTION-NC E ADEQUACY OF THE TES	AUTOPILOT-SQUARE-A/B	FAILURE MOE-OPEN, ELECTRICA AB NO WOLTAGE OUTPUT AT PLING BULT OF EXCESS CURRENT PLOM,	CORRECTIVE ACTION-NC CA EVERY BRIDGE WIRE	

GENERAL DYNAMICS CONVAIR SIVISION

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		DIFFICAL HER ALVIEW	DIFFICULTIES REVIEW AUTOFILO STRICK STREET	XIN.					_
	BYBIEL BUB-BIBIER	TEST/REPORT HUMBER PAILED COMPOMENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	TIME DIF OTH	- X	VENDOR NAME VENDOR PART NO	MANE PART NO	 ,
	AUTOPILOT-SQUARE-A/B PROGRAMMER	N2-08-04-4811F	FAR 63-69800-008	1020	FACTORY	2 0	541483		<u>:</u> _
*	FATLURE MODE-OUT OF TO L MOT KNOWN.	TCLENANCE. THE MOTOR DID NOT OPERATE BECAUSE THE MACHETS MERE MISSING. TIME AND PLACE OF REMOVA	E BECAUSE THE MACHETS	16 x 1 x 34	75. Tähe.	§ 9	ACE 04	REMOVA	
	CORRECTIVE ACTION-MANA AUTOPILOT-SQUARE-A/B PROCRAINER	MANUFACTURING PERSONNEL WERE INFORMED OF CT-80-04-178 CIRCUIT BOARD TRANSISTOR	OF THIS ANALYSIS. FAR 55-41001-901	#4092¢	PACTORY	33	SPERRY EN1233		
	FAILURE WODE-SHORT (EL UENT TESTING REVEALED I HICH MAS FOUND TO HAVE LED WHEN THE INPUT TEST TO CONDUCT EXCESSIVE CI	FAILURE MODE-SMORT (ELECT), THE PROGRAMMER FAILED DURING A DESIGN PROOF TEST WHEN SWITCH 14 MOULD NOT RESET, SUBSEQUENT TESTING REVEALED THAT THE FAILURE WAS CAUSED BY TRANSISTOR 0-4, SPERR TYPE ZNIESS ON CIRCUIT BOARD E7-TISSO, WITCH WAS FOUND TO HAVE A SMORTED CONDITION BETWEEN HE COLOR AND BASE, IT WAS DISCOVERED THAT THE TRANSISTOR FAILURED MINITAGE INAUTIEST VOLTAGE INAUMENTE. "IT DROPPED FROM 28 MOC TO ZE YOC DURING THE TEST CAUSING THE TRANSISTOR TO COMOUNT EXCESSIVE CLRRENT. THE CAUSE OF THE DROPPED FROM SUPPLY WOLTAGE WAS UNKNOWN.	FAILED DURING A DESIGN PROOF TEST WHEN SMITCH 14 WOULD NOT RESET. SUBSES CAUSED BY TRANSISTOR 6-4, SPERRY TYPE ENIESS ON CIRCUIT BOARD EP-71830. W BETWEEN THE COLLECTOR AND BASE. IT WAS DISCOVERED THAT THE TRANSISTOR FAI LY DROPPED FROM ES VIC TO 22 YOC DURING THE TEST, CAUSING THE TRANSISTOR THE DROP IN POMER SUPPLY VOLTAGE WAS UMKNOWN.	MACH SWITCH PE ZNIESS (MAR DISCOVI RIMG THE TI S LAWKHOWAL	1.14 WOULD DE CIRCUIT CRED THAT CBT, CAUS	T T T T T T T T T T T T T T T T T T T	NESET.	BUBBER BBO, W OR FAI IBTOR	
	CORRECTIVE ACTION-ACTION M	ACTION WAS INITIATED TO INSURE THAT THE POWER SUPPLIES USED DURING PROGRAMMER TESTING MEVER DROF.	HE POWER SUPPLIES USED	DURING PRO	SCR A POCER	TESTIA	46 NEVER	DRC	
	AUTOPILOT-SQUARE-A78 PROGRAMER	42-49-04-4916F 3417CH	FAR E7-44536-5	£970 \$40925	FACTORY	7ES 60/A	4/0:		1
	FAILURE MODE-CONTANTNA CAUSED BY A METAL MARKE	FAILURE MODE-CONTAHINATION, PRE ARN BUITCH 16 MAD ON CONTINNOUSLY THROUGH OUT THE TEST, SMITCH COULD NOT BE RESET. CAUSED BY A METAL MASHER LODGED DETHEEN THO RESISTORS OF BAITCH 16. MASHER WAS LEFT IN THE MODULE DURING ASSENBLY.	NTIHLOUSLY THROUGH OUT BUITCH 16. MISHER MAI	THE TEST, SMITCH COALD NOT BE RESET LEFT IN THE MODILE DURING ASSEMBLY.	SWITCH C	ore o	407 BE P	EDET. BLY.	
	CORRECTIVE ACTION-INSP	CORRECTIVE ACTION-INSPECTION AND MANUFACTURING PERSONNEL MERE INFORMED OF THIS ANALYSIS.	L WERE INFORMED OF THE	8 ANALYSIS					
	AUTOFILOT - SQUARE - A/B PROGRAPHER	GOA/BKFG4-042/L4-701-00-7102 CURRENT LIMITER	711647	71.0£ 6409£3	11	ž č			····
	PAILURE MODE-ELECTRICA S A REBULT OF LOW IMPED	RICAL OPEN, CURRENT LIMITER IN OUTPUT CIRCUITAY OF PROGRAMMER, MIGH POMER SMITCH NO.R BURNED OUT A MPEDANCE LOAD MITHEN THE CUNAR VALVE AFTER FIRING OF BOUISS AT STASING.	CIRCUITRY OF PROGRAMA	ER, HIGH PO	ER BHITCH	ğ	DANKE A	04 A	
1	SYSTEN EFFECT-NONE, LC TO PROTECT THE HIGH POL	STSTEN EFFECT-MONE. LOW IMPEDANCE SMORTS ARE EXPECTED MMEN COMAN VALVE SQUISS FIRE. CURRENT LINITERS ARE INSTALLED O PROTECT THE HIGH PONER BUITCHES.	HEN COMAN VALVE AQUISI	FIRE. CUR	RENT CIMI	7ER .	ARE INST	ALLED	
	WENTELE EFFECT-HOME.								

18 JUN 1946

SEMERAL DYNAMICS CONVAIR DIVISION

15 JUN 1966

DIFFICULTIES REVIEW-AUTCFILOT SYSTEM-AIRSORME

STORY SIME SIME STORY	TEAT/REPORT NUMBER DIF DATA BOURCE M	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	11 ME DIF	PRI VENDOR HAME OTH VENDOR PART NO	2
AUTOFILOT-SAUME-A/S	9LV-99-04-4086-F TAANSISTOR 8-6 EN1E35, 334/744	FAR 27-41609-3	640619	FACTORY	YES HUGHES	***************************************
FAILURE HODE-ELECTRICAL ESTING OF THE AZP PROGRAS UNG THE OUTPUT ASSOCIATE AS FOUND INTERNITIENTLY CT CAUSE OF THE TRANSIST D FURTHER TESTING RESULTS	FAILURE HODE-ELECTRICAL OPEN. THE PITCH-3 ASSEMBLY CAUSED A NO-60 ON PITCHOVER LEVEL AT 45.1 SECONDS OF AUTOMATIC TO ESTING OF THE AZP PROGRAMMER, PICH DIODE WATRIX FO UND THE ON AND OFF STATE. THE EMITTER TO BASE OF 4-6.1 WAS THE ON AND OFF STATE. THE EMITTER TO BASE OF 4-6.1 WAS FOUND INTERNITIENTLY OPEN CIRCUITED DUE TO EROSION OF THE COLLECTOR DOT AND FUSION OF THE COLLECTOR BASE. THE EXA AS CAUSE OF THE TRANSISTOR DAMAGE IS UMMOONN. IT IS PROSABLE A PARTIAL SHORT CIRCUIT OF THE EMITTER BASE EXISTED. AND PURTHER TESTING RESULTED IN OVERHEATING AND DAMAGE.	NO-GO ON PITCHONER INSTEAD OF 1.E VAC. BOTH THE ON AND OF E CCLLETON DOT AND E A PARTIAL BHORT CI	LEVEL AT TEST AMALY STATE. TH FUSION OF PCULT OF T	45.1 SEC 519 OF E 7HE COLL HE EMITTE	MDS OF AUTOMATIC CH DIODE MATHE TO BASE OF 4-6. CTOR BASE, THE I	- 0.3 4 #
CORRECTIVE ACTION-NOME.	. EXACT CAUSE OF FAILURE IS UNEHOWN.					
AUTOFILOT - SQUARE - A/B PROGRAMEER	LV-99-04-4647-F SILICON CONTROLLED RECTIFIER/SCR E 27-7257E-5 H663	FAR B A7-78978-3	3520 640406	FACTORY	7£8	***
FAILURE MODE-FAILED DUT MAIN IN THE CH-STATE AT M THE CH-STATE DURING CO	FAILURE MODE-FAILED DURING OPERATION. A/P PROGRAMMER FAILED DURING LOM-TEMPERATURE TEST WHEN SMITCH 14 FAILED TO REMAIN I MAIN IN THE OM-STATE AT 512 SECONDS. TEST AMALTSIS REVEALED THAT FAILURE IS ATRIBUTED TO AN SCR FAILING TO REMAIN I M THE OM-STATE DURING COLD TEMPERATURES IS NOT KNOMM.	D DURING LON-TEMPERA THAT FAILURE IS ATT AILURE TO FIRE AT LC	TURE TEST RIBUTED TO M TEMPERAT	WHEN SMI AN SCR URES 18	CH 14 FAILED TO AILING TO REMAIN IOT KNOWN.	
CCRRECTIVE ACTION-RAN L STIMG OF THE SCRS. SCRS ED TO 87-85900-060 RERUI	CCRRECTIVE ACTION-RAM LY-A9-04-3641 WAS ISSUED REQUESTING P/O TO AUTHORIZE USE OF SPEC 53-04361 FOR REQUIREMENTS TE STIME OF THE SCRS. SCRS SELECTED TO MEET THE REQUIREMENTS OF THIS SPEC SHOWED BETTER TURN-ON RESPONSE THAN SCRS TEST ED TO 87-85900-080 REQUIREMENTS, EVEN UNDER LOW TEMPERATURES.	PYO TO AUTHORIZE USE F THIS SPEC SHOUED B	OF SPEC 5	3-04361	OR REGUIREMENTS NISE THAM SCRS TE	¥ 5
AUTOPILOT-SQUAPE-A/B	LV-99-04-1848-F POMER SUPPLY	FAR 27-72572-3	3520 640804	FACTORY	YES NO	08 00 8
FAILURE MODE FAILED FUR REMAIN ON AT 512 BECS. I FAILURE IS ATTRIBUTED TO VIRCHMENT. CAUSE OF SCRI	FAILURE HODE FAILED DURING OPERATION, A/P PROCRAMMER FAILED DURING A LOW TEMPERATURE TEST WHEN 3MITCH 17 FAILED TO REMAIN ON AT 512 BECS. WITH ZBYDC. TEST AMALYSIS COMFINED FAILURE. FAILURE IS ATTRIBUTED TO AN SCR FAILING TO REMAIN IN THE CONDUCTING STATE WHEN THE CANISTER WAS SUBJECTED TO COLD EN VIRONMENT. CAUSE OF SCRE FAILING TO FIRE AT LOW TEMPERATURES IS UNKNOWN.	D DURING A LOW TEMPE FAILURY AT LOW TEMPE NDUCTING BYATE WHEN B IS UMKNOWN.	RATURE TES RATURE, BU THE CANIST	T NOT AT	NTCH 17 FAILED TRUCH TEMPERATURE	o . š
CORRECTIVE ACTION-RELIA 04361-1 FOR REGUIREMENTS RW-ON AESFONNE THAN BCRY	CORECTIVE ACTION-RELIABILITY ACTION REQUEST LV-AS-DA-SSA1. WAS ISSUED REQUESTING P/O TO AUTHORITE USE OF SPEC. SS- DASSI-1 FOR REQUIREMENTS TESTING OF THE SCRS. SCR/S SELECTED TO WEET THE REQUIREMENTS OF THIS SPEC. SHOWED BETTER TU RN-ON RESPONSE THAN SCR/S TESTED TO 87-93800-D80. REQUIREMENTS, EVEN UNDER LOW TENPERATURES.	. WAS ISSUED REQUEST D TO MEET THE REQUIR NYS, EVEN UNDER LOM	ING P/O TO EMENTS OF TEMPERATUR	AUTHORI THIS SPE	E USE OF SPEC. 55-	. 2
AUTOPILOT-BEUARE-A/B PROGRAMMER	LV-98-04-4480-7	FAR 87-41001-687	640603	PACTORY	NO 60/C	· · · · · · · · · · · · · · · · · · ·
FAILURE POOE-PAILED DUF	FAILUNG MOCE-FAILED DURING OPERATION, A/F PROGRAMMER REPORTEDLY FAILED WIEN A NO-GO OCCURNED ON 3M.R DURING AUTOMAT C (EBT, OUTPUT OF SUR MAS CHECKED AND FOUND TO BE 41VDC; BUT SMOULD MAVE BEEN-8VDC AT THAT TIME, EXTENSIVE TESTING	TEOLY PAILED WHEN A UT THOULD MAYE BEEN-	NO-60 OCCU	AT TIME.	ENTENDINE AUTOR	
	elektrika der dem deprimentelektrik der bestätt preservanget, det er er en				PAGE OLIO	1

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DIFFICULTIES REVIEW-AUTOFILO? SYSTEM-AIRSORNE

CONVAIR DIVISION

	9961 WAT 61	DIFFICK, THE REVIEW-AUTOFILOT STEEN-ATREORME	PILOT SYSTEM-AIRBOR	¥				
**********	#T#TEN #14-810ff	TEST/REPORT HUMBER FAILED COMPONENT MANE	DIF DATA BOURCE PART HUMBER	VENICLE BITE DATE DIF TIME DIF	SITE TIME DIF		PHI VENDOR MANG	·
	AUTOFILOT-RALARE-A/B PRUGRAMMER	SLY-AS-04-4818-F	FAR 69-41001-833	0071-2 440710	FACTORY	VE\$ 60/C	5/0 5	987100
	FAILURE MOE-OST OF TOLE , THE TIMING OF THE VARIA ILURE MAS DUE TO AN SCR TO	TOLERANCE, DURING COMPOSITE TESTS THE QUYPUT YOLTAGE OF SMITCH IS MAS OBSERVED TO YARY SLIGHTLY VARIATIONS CORRESPONDED WITH THE VOLTAGE VARIATIONS OF THE SLOT USED TO BRINE SMITCH IS. FASCA THAY FAILED TO GO INTO COMPUCTION DEEP ENDUMN TO CAUSE ISOLATION OF THE GATE AND CATMODE LEA	WARIATIONS OF THE TERMONENT CAUSE	17CH 18 MA 11HE BLOT 18OLATION	USED TO E	OR TE	VARY BLIGHTLY BWITCH 19. FA ND CATHODE LEA	
	CORRECTIVE ACTION-AS OF NETERS AS PART OF THE TES	CORRECTIVE ACTION-AS OF 771/64 ALL INCOMING COTS SILICON-CONTROLLED RECTIFIERS WILL BE TESTED USING DIGITAL VOLT ETERS AS PART OF THE TEST SETUP TO PREVENT MARGINAL BAD SCRS FROM BEING PASSED.	-CONTROLLED RECTIFIL S FROM BEING PASSED		201637	2 2 2	e DIGITAL VOLT	
	AUTOFILOT - SEUARE - A/S PROGRAMMER	ACHAS-001-18/FC-CO-02-0071-002 SCR HIGH SMICH 18	COMPOST TE-FACYORY 89-41001-833	7102 640708	FACTORY	2 9	3/ 9	
	FAILURE MODE-FAILURE DUM MIF'S BETWEEN SMITCH ACTE	FAILURE MODE-FAILURE DURING OPERATION - THE CUIPUT OF HP SM MIF'IS BETWEEN SMITCH ACTIVATION AND PROGRAMMER RESET.	SMITCH 15 HONITORED ON MA & CHAMMEL 19 INDICATED WOLTAGE &	N ME P CMA	MEL 19	21041	ATED VOLTAGE &	
	SYSTEM EFFECT-ERRATIC OPERATION VEHICLE EFFECT-CONFOSITE RE-SCH	SYSTEM LTFECT-ERRATIC OFFRATION. VEHICLE EFFECT-COMPOSITE RE-SCHEDULED, COMPOSITE AND BUSSYSTEM LEVEL RETESTING MAS RESUIRED.	TEH LEVEL RETESTING	SAS REGUI	ġ			
	CORRECTIVE ACTION-IND PROGRAMMER AND REPLACED.	TOGRAMMER AND REPLACED.						
	AUTOFILOT - SQUARE - A/W	ALV-89-04-4429-F AUTOFILOT PROGRAMMER/SMITCH 4	FAR 89-41001-833	640708	FACTORY	ă č		*****
	FAILURE MODE-FAILED DUR! INES DIASING TO 29 DEGREE REPORTED FAILURE. THE RE FICIENCY.	FAILURE HODE-FAILED DURING OPERATION-INTERMITTENT MALFUNCTION REPORTEDLY OCCURRED TO SM. 4 RESULTING IN VERNIER ENG NES BIASING TO 29 DEGREES. THE A/P PROGRAMMEN WAS SUBJECTED TO EXTENSIVE TESTS IN AN EFFORT TO COMPIRM OR DUPLICATE REPORTED FAILURE. THE REPORTED FAILURE COULD NOT BE CONFIRMED. THE TROUBLE WAS POSSIBLY DUE TO A MAPCHE FUNCTION DE ICIEMCY.	OH REPORTEDLY OCCUR! . TO EXTENSIVE TESTS ED. THE TROUBLE WAS	NED TO SW. IN AN ETP POSSIBLY	4 MESUL.	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	IN VERNIER ENG H OR DUPLICATE HE FUNCTION DE	
2	CORRECTIVE ACTION-EMINEERING HODIFICATION CARD CONDINATION FOR PALC II AND ONE FOR HAB HOUR R AND SIMULTANEOUBLY LIFT THE PROGRAMMEN 6 ANY NAPCHE RUN AS REQUIRED DURING TROUBLE ON A BOI WHENEVER NAPCHE IS COMMECTED.	CORRECTIVE ACTION-EMINEERING HODIFICATION OF THE MARCHE DEFICIENCY WITH THE FOLLOWING INTERIM ACTION, 1. A MARCHE CARD CORDINATION FOR PALC 11 AND ONE FOR MAB S WILL BE PREPARED WHICH WILL PROGRAM MANUAL RESET TO THE FLIGHT PROGRAM WAN APPLICATION OF AC FOMER DURIN 6 ANY MAPCHE RUN AS REQUIRED DURING TROUBLE BHOOTING AND/OR RECYCLING, B. ESSAIAS RESET MODULE SHALL BE DISCONRECTED ON A BOT MERVER MARCHE IS COMMECTED.	FICIENCY WITH THE FY RED WHICH WILL PROG THE CARD WILL BE USE RECYCLING, B. ESSAIL	OLLOWING I RAM MANUAL ED UPON AP AA RESET H	RESET TO	7 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 1 1 1 1	THE FOLLOWING INTERIM ACTION, 1. A MAPCHE. PROGRAM MANUAL RESET TO THE FLIGHT PROGRA BE USED UPON APPLICATION OF AC POWER DURIN E156A1A4 RESET MODULE SHALL BE DISCONFECTED	
	AUTOFILOT-BRUARE-A/B PROGRAMMER	COA/BRF84-028/P8-4CO-02-214 AMPLIFIER	COMPOST TE-& FACT	£1 €5 640 70£	E	99	y/95	
	FAILURE HODE-OUT OF SPECIFIC 1VE ASE ISOLATION AMPLIFIERS.	of specification of tolerance accurate roll program could not be bet into programmer due to defect Amplifiers.	L PROGRAM COLLE NOT	BE SET IN	TO PROGRE	Ĭ	DUE TO DEFECT	
		والمعاونة والمتعاونة والمتعاونة والمتعاونة والمتعاونة والمتعاونة والمتعاونة والمتعاونة والمتعاونة والمتعاونة					PAGE 0151	7-7

SEMERAL DYMANICS CONVAIR DIVIBION

	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TOPILOT SYSTEM-AIRBOR	¥				ſ
SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT MANE	DIF DATA BOURCE PARY MUMBER	VENICLE DATE DIF	317E 714E 01F	PRI	PRI VENDOR NAME OTH VENDOR PART NO	
STRIEM EFFECT-INFROMER A	ER AMICO SIGNALS.	oran de la companya de la compa					***
WHICLE EFFECT-MOME.							
CORRECTIVE ACTION-CHANGED	D GROUND ISOLATION AMPLIFIERS.						
AUTOPILOT - SQUARE - A/B	olv-99-04-460sf Clock-binary-Wiring	FAR 69-41001-835	7101 640630	PACTORY	YE O		****
FAILUNE MODE-CONTANINATI ES 3:5:0:10:10:51: AND 3E DID WOT RECUR. VAILURE N COLD SOLDER BETWEEN THE C	FAILURE MODE-CONTANIMATION, DURING FACTORY ELECTRICAL TESTS THE DIGITAL CLOCY STOPPED AT 284,381 SECOMDS AND SMITCH ES 3-5-5-16-15-13, AND 32 GAVE NO-GO INDICATIONS. ON RERUNS THIS INDICATION OCCURRED SEVERAL TIMES, DISSPERABLD, AND DID WOT AECUR. VAILURE WAS DUE TO A SHORT CIRCUIT OF A BINARY IN THE CLOCK CIRCUIT. THE SHORT WAS DUE TO A SLAB OF COLD SOLDER BETWEEN THE CATHODE OF DIODE CR-1 AND THE ANONE OF CR-5.	18 THE DIGITAL CLOCY S THIS INDICATION OC MARY IN THE CLOCK CIN E OF CR-5.	STOPPED AT URRED SEVE CULT: THE	264.361 RAL TIMES SHORT WAR	ECOSD DISA	S AND SMITCH PPEARED, AND D A SLAS OF	
CORRECTIVE ACTION-BEGINS TION AID TO INSURE GAP RE	CORRECTIVE ACTION-BEGINNING FEBRUARY 14, 1964 FACTORY INSPECTION PERSONNEL NERE USING 0.020 INCH GASES AS AN INSPEC TION AID TO INSURE GAP REGUIREMENTS BETWEIN LAND TERMINALS.	PECTION PERSONNEL NEI	E USING O.	020 INCH	AGES	AB AN INSPEC	
AUTOPILOT-SQUARE-A/B	3LV-90-04-4812-F	FAR 69-41001-833	7101 640622	M.	TES 60/C	Ų	90 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FAILURE MODE-FAIL TO OPE RECORDER, A RESUM MAS PET LANDLINE RECORDING OF THE COMDE, MHICH CORRESPOND T	OPERATE AT PRESCRIBED TIME, DURING SYSTEM TESTS NO PITCH PROGRAH MAS OBSERVED ON THE LANDLINE PEFFORMED, USING A WOLNETER AT THE UMBLICAL JUNCTION BOX AND THE FAILURE WAS CONFIRMED. THE THE SHOWED SHOWED SHOWN LOW AMPLITUDE SPIRES OCCURRING AT TO-105, 120, AND 137-3 SE OD TO CERTAIN PITCHPROGRAM LEVEL CHANGE TIMES.	TSTEM TESTS NO PITCH UMBLIFCAL JUNCTION BY OW AMPLITUDE SPIRES (SE TIMES).	PROGRAH WA K AND THE KCURRING A	S OBSERVE FAILURE W T 70,105,	2 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ME LANDLINE FIRMED, THE AND 137-3 BE	
CORRECTIVE ACTION-NOWE.	FAILURE COULD NOT BE TRACED TO THE PROGRAMMER AND THE CAUSE COULD NOT BE DETERMINED.	C PROGRAMMER AND THE	CAUPE COLA	D NOT BE	DE YERM	INED.	
AUTOPILOT - SQUARE - A/B PROGRAPHER	LV-AB-DA-48DG-F CIRCUST GOARD TRANSISTOR	7AR 53-41001-88	1310	FACTORY	45 B		3
FAILURE HODE-ELECTRICAL PAILURE HAS DUE TO AM GPE HE PROGRAHMER.	FAILURE MODE-ELECTRICAL BHORY, DURING FACTORY FINAL CHECKOUT THERE WAS NO OUTPUT FROM SWITCH 28 (OPEN WENT VALVE). AILURE HAS DUE TO AM GPEW G-12 TRANSISTOR, THE TRANSISTOR WAS PROBABLY BURNED OPEN BY A SHORY CIRCUIT EXTERNAL TO T RE PROGRAMMER.	OUT THERE IMA NO OUT! MAS PROBABLY BURNED	UT FROM BY OPEN BY A	SHORY CIR	S COLUMN	ENT VALVE) . XTERNAL TO T	
CORRECTIVE ACTION-60/C P	CORRECTIVE ACTION-60/C PACTORY PERSONNEL WERE INFORMED OF THE RESULTS. NO OTHER ACTION COULD BE TAKEN.	THE REBULTS. NO OTHE	R ACTION O	OULD BE T	KEN.		
						PAGE D152	

DIFFICULITES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	817E 71ME DIF	N N	DATE DIF TIME DIF OTH VENDOR PART NO	
autopilot-square-a/B Programer	8LV-A8-08-4789-F COMMECTOR	7AR 68-41001-888	7102	FACTORY	y 3 2	Ų	
AILED DUR	FAILURE MODE-FAILED DURING OPERATION, DURING SYDTEMS CHECKING IN THE FINAL CHECKOUT AREA THE PITCH PROGI DROPPED TO ZERO WOLTS, REPORTED TO BE CAUSED BY A LOGGE UMBILICAL COMMECTER OR TEST EBUIPMENT COMMECTOR.	ING IN THE FINAL CHE	CKOUT ARE/ TEST EBUIL	THE PITC	и Р ВОС-	CHECKOUT AREA THE PITCH PROGRAM WOLTAGE ON TEST EBUIPMENT COMMECTOR.	
TION-FAILU	CORRECTIVE ACTION-FAILURE NOT CONFIRMED. CONNECTORS WERE TIGHTENED IN THE FINAL CHECKOUT AREA.	IGHTENED IN THE FINA	L CHECKOU	AREA.			
AUTOFILOT - SAUARE - A/B PROGRANNE.R	6943448 ARM-3AFE BMITCH	UTP-PET E7-02347-1	*******	5/03	YES KINETICS NO NG34-1	KINETICS N034-1	:::
FAILURE MOE-OUT OF TOLI R FAILURES ON SAME PART (GUIRDENT IS 200 MILLIVO	FAILURE MOCE-OUT OF TOLERANCE, READINGS WERE OUT OF TOLERANCE DURING CONTACT RESISTANCE TEST OF P.E.T. TEST, SIMILA R FAILURES ON SAME PART ON 44/4/18 AND 44/4/23. REFER TO FRR 338. READINGS WERE FROM 200 TO 325 MILLIVOLTS (SPEC, RE GUIRDENT IS 200 MILLIVOLTS MAK.).	FCE DURING CONTACT R 1 338. READINGS WERE	ESISTANCE	TEST OF P	.E.T.	IEST, SINILA IS (SPEC, RE	
CTION-ECP 7:	CORRECTIVE ACTION-ECP 7690 (TO CHANGE MAXIMAN ALLOMBLE VOLTAGE DROP TO 500 HILLIVOLTS) WAS DISAPPROVED BY THE CUST OMER. CIC 16367 MILL BE RESUBMITTD.	.1AGE DROP TO 500 M	1.11 VOL. 78)	143 013AP	PROVED	BY THE CUST	
AUTOFILOT - SAUARE - A /B PROGRAMMER	LV-9D-04-4821F ACCELEKOMETER RELAY	FAR E7-04099-803	******	E 5	2 2 2 2	EDCL IFF	******
FAILURE HODE-OUT OF TOLI AILURE HAS CONFIRMED BY I	OF TOLERANCE, THE ACCELEROMETER WAS REJECTED BECAUSE THE OUTPUT RELAY DROPPED OUT TOO SLOMAY. NO FINED BY FAILURE AMALYSIS, THE FAILURE WAS ATTRIBUTED TO MARCHE PROGRAM DEFICIENCIES.	ED BECAUSE THE OUT! TRIBUTED TO MAPCHE	NUT RELAY (MOPPED OF	8	HOM.Y. NO F	
LCT I CH-HOME.	COMMECTIVE ACTION-NOME, AT THE TIME OF THIS REJECTION ONLY ONE LAUNCH REMAINED USING THIS PROGRAM.	ONE LAUNCH REMAINED	148 THE TH	IS PROGRAM			
AUTOPILOT-SEUARE-A/B PROGRAMICR	A-A8-04-4835-F DIODE IM645 IN BAFE LINE	FAR 27-43901-803	8090119	PACTORY	4 Q		1
- SHORT ELECTION OF PERTENT SHE	FAILURE MOSE-SHORT ELECTRICAL, THIS PROGRAMMER REPORTEDLY FAILED WHEN AN EXPECTED SUSTAINER CUTOFF SIGNAL WAS NOT P RESENT ON PLUG P-4 PIN-B, DIOJE IMBAS IN THE SAFE LINE WAS FOUND OPEN CIRCUITED, EXPERIENCE SHOWS CAUSE OF THIS PAIL URE IS AN INADVERTENT SHORT CIRCUIT OF THE BUITCH OUTPUT TO GROUND.	AILED WHEN AN EXPECTORED OPEN CIRCUITED GROUND.	TED BUSTA	THER CUTOF	T SIGN	OF THIS PAIL	

PACE 0183

CORRECTIVE ACTION-NO CORRECTIVE ACTION COULD BE INITIATED BINCE EXACT CIRCUMSTANCES OF FAILURE COULD NOT BE FOUND. FACTORY PERSONNEL MERE CAUTIONED CONCERNING THE EFFECT OF BHORTING THE OUTPUT TO GROUND.

GENE, _ DYNAMICS CONVAIR DIVISION

13 JUN 1988

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

******	AYBIEM BUB-BYBIEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE PRI DATE DIF TIME DIF OTH	PRI VENDOR MANE	
	AUTOPILOT-BAUARE-A/B PROGRAMMER	SLY-90-04-4792-F	FAR 68-41001-633	7101 MTR 640605	YEE NO	0027460
	FAILURE MODE-OUT OF TOLE SWITCH 13 TRIGGERED IN 1 O SWITCH SCRS BEING TENPE	PAILUME MODE-OUT OF TOLERANCE, DURING BOOSTER CHECKOUT THE BOOSTER JETTISON SUITCH EXHIBITED NO-66/6 INTERHITTENTLY. Switch is triccered in the correct time sequence but turned off when mapche card 24 was inserted. Failume was due t Symitch scribeling temperature sensitive and margimal in regards to design parameters.	BOOSTER JETTISON SIV OFF WHEN MAPCHE CAI GARDS TO DESIGN PAR	ITCH EXHIBITED NO ND 24 WAS INSERTE NMETERS.	-604 INTERMITTENTLY. D. FAILUME WAS DUE T	
	CORRECTIVE ACTION-6D/C R ARGINL SCRS WILL NOT BE SMITCH IS ON SLW-3 PROGR	CORECTIVE ACTION-GD/C RECEIVING INSPECTION PROCEDURES WERE REVISED TO REQUIRE USE OF DIGITAL VOLTWETER TO EMSURE M ARGINAL SCRS WILL NOT BE USED AS A 27-07393-1 PART MAGGER. ECP 7791 WAS IMPLENCIMED REQUIRING SCR 55-04361-1 USED AS SMITCH IS ON SLY-3 PROCHAMMERS.	REVISED TO REQUIRE CP 7791 WAS IMPLENCE	USE OF DIGITAL W ITED REQUIRING SC	OLIMETER TO EMBURE IN R 55-04361-1 USED AS	
	AUTOFILOT-SQUARE-A/B PROGRAFMER	69A2887.2 ACCELEROMETER BMITCH	UTP-ETT E7-04099-1	440604	YES EDCLIFF	043670
	FAILURE MODE-OUT OF SPECIFICATION, DURING ED-S/M DO64 HAD THE BELLONS MISSING, S/M DO BOND WAS LOST AT THE DISCRETER TO FRRSIE.	' SPECIFICATION, DURING THE DETAILED EXANIMATION OF PRODUCT, THE FOLLOWING DISCREPANCIES WERE NOT BELLOMS MISSING. S/N DOTT HAD THE BELLOMS SEPERATED FROM THE SEALING DISC. AND O-RING ASSEMBLY.	INATION OF PRODUCT, S SEPERATED PROM TH	THE FOLLOWING DI E BEALING DISC. A	SCREPANCIES NERE NOT NO O-RING ASSEMBLY.	
	CORRECTIVE ACTION-SARNON	CORRECTIVE ACTION-SAKNOWS. QUALITY CONTROL PROBLEM, MOMEVER, VENDOR HAS SUCCESSFULLY COMPLETED TESTS WITH BELLONG R MOVED.	, VENDOR HAS SUCCES	SFULLY COPPLETED	TESTS WITH BELLONS R	
	AUTOPILOT - SQUARE - A/B PROGRAMER	ACU83-001-14/FC-CO-01A-0502-004 TAAN313TOR	COMPOST TE-PACTORY	156D FACTORY 640516	2	*****
	FAILURE MODE-FAIL TO CEA IMES AND COULD NOT BE REE MAGE (SHUNTING DIODE) ACR FIELD OF THE RELAY AT REE	FAILURE WODE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME, PROGRAMMER SWITCH ES (OPEN WENT VALVE), COMDUCTED AT ALL T IMES AND COULD NOT DE RESET. TRANSISTOR EMIZSS OF SWITCH ES WAS FOUND DEFECTIVE. INVESTIGATION REVEALED THAT DIODE S MAGE (SHUWITHE DIODE) ACROSS THE COIL OF RELAY KTAS (AGE) MAS OPEN. THE RESULTANT VOLTAGE, CAUSED BY THE COLLAPSING FIELD OF THE RELAY AT RESET WAS SUFFICIENT TO DAMAGE THE AIRBORNE TRANSISTOR. THE AGE DIODE WAS PRIMARY FAILURE.	OCRAMMER SMITCH ES MAS FOUND DEFECTIVE B OPEN. THE RESULTA BORNE TRANSISTOR. T	OPEN VENT VALVE) . INVESTIGATION R NT VOLTAGE, CAUSE HE AGE DIODE MAS	COMDUCTED AT ALL T EVEALED THAT DIGGE 1 D BY THE COLLAPSING PRIMARY FAILURE.	
	SYSTEM EFFECT-INFROPER DISCRETE SIGNALS.	DISCRETE SIGNALS.				
	VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED. SYSTEM AND COMPOSITE RETESTING MAS REQUIRED.	RETESTING WAS REQUI	ė		
	CORRECTIVE ACTION-THE AS	CORRECTIVE ACTION-THE AGE RELAY X744 AND THE AIRBORNE PROGRAMMER WERE REPAIRED.	AIMER WERE REPAIRED			
	auto-ilot-square-a/g Procramer	LV-A8-04-4783-IF SWITCH-FLIP F. OP BIODE	FAR 89-41001-877	156D FACTORY 640518	YES TO	
	FAILURE MODE-ELECTRICAL GUISM AFTER THE ERASE COM O DE CAUSED BY AN OPEN CI	FAILURE MODE-ELECTRICAL OPEN, DURING THE MIBBILE FINAL CHECKOUT THE OPEN VENT VALVE INDICATOR LIGHT MOULD NOT EXTIN GUISY AFTER THE ERASE COMMAND MAG GIVEN, FAILURE MAB DUE TO AN OPEN GIZ: BPERRY EN 1833 OUTPUT TRANSIBTER BELIEVED T O DE CAUSED BY AN OPEN CIRCUITED DIODE ACRORS THE COIL OF RELAY R744.	KOUT THE OPEN VENT AN OPEN GIZ: SPERRY LAY K744.	VALVE INDICATOR L EN 1835 OUTPUT T	IGHT MOULD NOT EXTIN	

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DIFFICULTIES REVIEW-AUTOPILOT STRIEM-AIRBORNE

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URCE VEHICLE SITE PRI VENDOR NAME ER DATE DIF TIME DIF OTH VENDOR PART NO	ADDING AN ELECTRICAL CHECK OF DIODES OR 729 PROCEDURE.	640513 60/C YES ITT 899624 NO PAESSE RESET PREMATURELY, INTERNITTENT SHORTING BEING BROKEN OFF FROM DISC, REFER TO FRR	PAADOR ED/C YES ITT 899983	RESET PREMATURELY. INTERMITTENT BACRTIMS I 1448. TICAL DIGITAL CIRCUITS TO SPRAGUE ONLY CAP	840430 FACTORY YES NO	1950 FESTONY YES EADARD NO REAL THE OUTPUT FROM SWITCH ES NAS EITHER DANSELD TRANSISTORS (8-10 AND 8-15) THAT W
TEST/REPORT NUMBER DIF DATA BOURCE FAILED COMFOMENT NAME PART NUMBER	VC MODIFIED THE TEST PROCEDURE AY-83-0325-008-12 BY ADDING AN ELECTRICAL CHECK OF DIODES OR 729 USED IN THE CHECKOUT PANEL AS PART OF THE VALIDATION PROCEDURE.	UTOFILOT-SAUMRE-A/B 69AE887.1 CIRCUIT BOARD-CAPACITOR C-E -TANTA 81-3480G-037 CIRCUIT BOARD-CAPACITOR C-E -TANTA 81-3480G-037 LUM- FAILURE MODE-SHORT-ELECTRIC-DURING PRI X AND Z-AXIS VIBRATION, PROGRAHMER RESET PREMATURELY. INTERNITTENT SHORTING OF CAPACITOR (ITT.PAESSE) ON BOARD ATAL OF POMER BUDILE DUE TO BLUG BEING BROKEN OFF FROM DISC. REFER TO PRR 1448.	CORRECTIVE ACTION-ECP 3480 HAS BEEN APPROVED MICH CHANGED PROGRAMMER CRITICAL DIGITAL CIRCUITS TO SPRAGUE ONLY CAP CITOR. TOFILOT-SQUARE-A/S 68\tess? CIRCUIT BOARD CAPACITOR C-1 -TANTA 81-34800-036 640502 NO LUM-	FAILURE MODE-BANNT-ELECTRIC-DURING PRI Z AND Y-AKÍS VIBRATIÓN PROGRAMMER RESET PREMATURELY. INTERNITTENT BHORTIME I M CAPACITOR (ITT:PAADGE) ON BOARD FEAR OF PERET LOGIC BOARD. REPER TO FRR 1448. CORRECYIME ACTION-ECP BAGE HAS BEEN APPRONED WHICH CHANGED PROGRAMMER CRITICAL BIGITAL CIRCUITS TO SPRAGUE ONLY CAPACITORS.	LV-99-34-4766C FAR 640430 FACTORY YES CIRCUIT BOARD TRANSISTOR 35-41036-858 HODER NO YOLERANCE, DURING BUS-ARRENGLY YESTING, THE LOGIC NETWORK, MAS FOUND TO HAVE LOM GAIN BUE TO DEF	VICCILET-SQUARE-A/B LV-AS-D4-4768-F FAN 1950 FATONY YES WOCKAMMER FALLOGI-STY 6404ES NO NO NO FALLOR NO NO FALLORE MODE-STRUCTURAL, DURING INTEGRATED YESTS IN THE FINAL CHECK OUT AREA; THE OUTPUT FROM SWITCH ES NAS EITHER PRESENT AT ALL TIMES OR NEVER PRESENT AT ALL TIMES OR NEVER PRESENT. CAUSE OF PAILURE WAS TRACED TO TWO DAILINEED TRANSISTORS (8-10 AND 8-14) THAT ESE APPARENTLY INADVERTENTLY OVERLOADED DURING TESTING.
AVBITCH BLE-BYBTEH	CORRECTIVE ACTION-ED/C M TO CR 742 AND CR744 URED	AUTOPILOT-BAUARE-A/B PROGRAHMER FAILURE HODE-SHORT-ELECTS OF CAPACITOR (ITT, PAESSB) 1448.	CORRECTIVE ACTION-ECP 344 ACITOR. AUTOFILOT-SQUARE-A/S PROCRAMER	FAILURE MODE-SHORT-ELECTR M CAPACITOR (ITT.PAADGB) COCKECTIVE ACTION-ECP 344	AUTOPILOT-SQUARE-A/B P OGRANMEN FAILURE HODE-OUT OF YOLEN ECTIVE 0-12 AND 0-14 FIAM CORRECTIVE ACTION-NOME, C	PROGRAMER PROGRAMER FRILUE MODE-BTRUCTURAL, PRESENT AT ALL TINGS OR NE

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DIPFICULTIES REVIEW-AUTOPILOT STATEM-AIRBORNE

E PRI VENDOR HAME	D TO EXERCISE ENTREME	AY SPERAY COSSES	THE FACTORY AUTOMATIC RS. THE ELECTRICAL CMA RWITCHING CIRCUITRY.	TORY ASSEMBLIES MERE R	RY 60/C 694255	HS BUT SHOULD MAVE REA ANCE R-4.	CONNECTION AND REDUES	YES A.C.ELECTRONIC 881808 NO 5 ACSA77	A.T. A SERICE OF MINU OR NOT USING THE BEST	***	WENDOR WAS MOTIFIED OF THE P
DIF DATA SOURCE VEHICLE SITE	FAILURE CAUSE AND MERE CAUTIONES	FAR 640487 FACTORY R7-41438-801	EJECTED FOR EXHIBITING NO-60 ON 'S FOR THE HUGHER ENIESS TRANSIETOLE WITH THE AUTOPILOT PROGRAMMER !	LETURNED THEN FOR REMORK, ALL FACT	FAR 3406-1 640422	NJT RESISTANCE R-4 READ 10.0 K CHI CTION AT OME COMMECTOR OF RESIST	, WENE APPRISED OF THE UNSOLDERED	UTP-PET 640416 60/C E7-04180-1	ING THE THERMAL SHOCK TEST, PARA. 18). THIS MAS CAUSED BY THE VEHON		ESTING MAS CONTINUED, THE VENDOR COLING, RTP, FR 654-2-250.
TEST/REPORT NUMBER	CORRECTIVE ACTION-PERSONNEL IN CHECKOUT AREA WERE APPRISED OF FAILURE CAUSE AND MERE CAUTIONED TO EXERCISE EXTREME	LV-BB.D4-4775F TRANSLETOR	FAILUNE WODE-ENRATIC CPENATION, THE PITCH E ASSEMBLIES WERE REJECTED FOR EXHIBITING NO-GO ON THE FACTORY AUTOMATIC TEST SET, TROUBLE WAS TRACED TO SPERRY REPLACEMENT TRANSISTORS FOR THE HUGHES ENIESS TRANSISTORS. THE ELECTRICAL CHA RACTERISTICS OF THE SMERRY ENIESS TRANSISTORS WERE INCOMPATIBLE WITH THE AUTOPILOT PROGRAMMER SMITCHING CIRCUITRY.	60/C SURVEYED ALL BOOSTER PROGRAMMERS AND RETURNED THEM FOR REMORK. ALL FACTORY ASSEMBLIES WERE THE SPERRY TRANSISTORS WITH HUGHES.	SLV-99-D4-4795 FINARY CIRCUIT BOARD WIRING R	FAILURE HODE-OUT OF TOLERANCE, DURING THE BUB-ABSENDLY CHECKOUT REBIBTANCE R-4 READ 10.0 K OHKS BUT SHOULD MAVE REA) Leas than 8.14 K OHMS, FAILURE MAS DUE TO A SOLDERLESS COMMECTION AT OME COMMECTOR OF RESISTANCE R-4.	CORRECTIVE ACTION-60/C MANUFACTURING AND INSPECTION PERSONNEL MENE APPRISED OF THE UNSOLDERED CONNECTION AND RESUES	CHOKE-TRAMPORMER TYPE R	FAILURE MODE-STRUCTURAL. DURING THE VISUAL INSPECTION FOLLOWING THE THERMAL SHOCK TEST, PARA, 4.7, A SERIES OF MIN TE CRACKS NERE GISERNED ON ONE SIDE OF THE TEST SPECIMEN (LOT 18). THIS WAS CAUSED BY THE VENDOR NOT USING THE BEST MAMMIRACTURING METHODS AND THE PROPER POTTING TECHNISHE.		CORRECTIVE ACTION-THIS PAILLING MAS CONSIDERED MINOR AND PET TESTING MAS CONTINUED. THE OBLEN AND TOOLING, RIF. FR 634-2-250.
87.87EH	CORRECTIVE ACTION-PERSONN CARE WHEN TROUBLESHOOTING	AUTOFILOT-BAUARE-A/B	FAILURE MODE-ERRATIC OPEN- TEST SET, TROUBLE MAS TRACI RACTERISTICS OF THE SMERRY	CORRECTIVE ACTION-6D/C SU	AUTOPILOT-BOURE-A/B	FAILURE WODE-OUT OF TOLERA D LESS THAN 8:14 K CHM8. FJ	CORRECTIVE ACTION-60/C NAMIFACTUR	AUTOFILOT-SQUARE-A/B	PAILURE MODE-BINUCTURAL: TE CRACKS MERE GUSERNED ON MAMMFACTURING METHODS AND		CORRECTIVE ACTION-THIS PA

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PILOT BYSTEM-AIRBORME	DIF DATA BOURCE VEHICLE BITE PRI VENDOR MANE PART NUMBER DATE DIF THE DIF OTH VENDOR PART NO	CORRECTIVE ACTION-FAILURE NOT CONFIRMED, GO/C ISSUED A DEPARTMENTAL INSTRUCTION DIRECTING PERSONNEL TO VERIFY FAILURE IN COMPONENT AFTER IT HAS BEEN RENOVED FROM THE SUB ASSEMBLY, IF PAILURE CAN NOT BE CONFIRMED IN THE COMPONENT, THEN THE ENTIRE SUB-ASSEMBLY SHOULD BE FORMARDED FOR FAILURE ANALTSIS.	FAR 3500 WTR YES 87-72565-5 640410 NO	MINATION. DURING PROCEDURE CHECKOUT IN THE MISSILE ASSEMBLY AREA BOOSTER 1 AND E EMGINES TENT MAR THE PITCH AND YAW PLANE BETWEEN THE TIME THE SUSTAINER ENGINE WAS MULLED AND THE PLIGHT PROCRAMME FLIGHT RESET, THE BOOSTER ENGINES RETURNED TO MALL. FAILURE WAS DUE TO A LEARY A-E TRANSISTOR THA	CORRECTIVE ACTION-RAYTHEON COMMERCIAL-TIFE ENGESA TRANSISTORS WERE FUNGED DURING MARCH 1964 IN ALL ASTROMAUTIC STOR S. THE AUTOPILOT SERVO AMPLIFIER WILL ALSO BE SUBJECTED TO A THO HOM WARMUP PERIOD TO DETECT HEAT-SENSITIVE LEAKY RANSISTORS IN THE NAMMERCTUATING FINAL CHECKOUT AREA DEFORE ELECTRICAL ACCEPTANCE TESTING IS PERFORMED. FACTORY TEST MODIFIED TO DETECT DEFECTIVE TRANSISTORS.	FAR 64040K FACTORY NO KINETICS 27-02047-1	FAILURE MODE-SHORT (ELECTRICAL), DURING FACTORY SUBASSEMBLY TESTING THE ARM/SAFE SWITCH CONTACTS N-1, X-E AND X-3 M ERE SHORT CIRCUITED TO EACH OTHER. THIS NAS DUE TO SHORT CIRCUITED CAPACITORS IN THE RFS NETWORK. OPEN CIRCUIT DIODE S MERE ALSO FOUND ACROSE THE MOTOR SMITCH, CAUSE DUE TO APPLICATION OF 28 YDC IN REVERSE POLARITY. TWO MANUFACTURING AREA MORK BENCH ES WOC OUTLETS MERE FOUND CONNECTED IN REVERSE POLARITY.	CORRECTIVE ACTION-GO/C CHECKED ALL RS VDC CUTLETS IN THE AREA AND RECOMMENTED THOSE FOUND IN REVERSE FOLARITY. TOPILOT-SMUARE-A/B LV-88-04-4728F FAR F7-41001-833	DURING OPERATION, THE PROGRAMMER STOPPED AT 128.389 BECONDS DURING CHECKOUT IN THE LABORATORY. LA 821 H/D NO GO INDICATION.	PAGE O157
DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORME	TEST/REPORT HUMBER FAILED CONFOMENT NAME	CORRECTIVE ACTION-FAILURE HOT CONFIRMED. GD/C 185UED A DEPARTMENTAL RE IN COMPOMENT AFTER IT HAS BEEN RENOVED FROM THE SUB ASSEMBLY. IF P. MEN THE ENTIRE SUB-ASSEMBLY SHOULD BE FORMARDED FOR FAILURE ANALTSIS.	LV-BD-D4-4754-F AMPLIFTER-BERVO TRANSTAT	FAILU'S MODE-CONTAMINATION. DURING PROCEDURE CHECKOUT IN THE MISSILE ASSEMBLY AREA BOOSTER OVER POSITIVE IN THE PITCH AND YAW PLANE BETWEEN THE TIME THE SUSTAINER ENGINE MAS MALLED MAS ZENCED. UPON FLIGHT RESET, THE BOOSTER ENGINES RETURNED TO MALL. FAILURE MAS DUE TO A	RAYTHEON COMERCIAL-TYPE ENGEGA TRANSISTOS SERVO AMPLIFIER WILL ALSO BE SUBJECTED TO A NAMUFACTURING FINAL CHECKOUT AREA BEFORE I T DEFECTIVE TRANSISTORS.	SLV-99-04-4761-F ARM/SAFE BHTCH	FAILURE MODE-SHORT (ELECTRICAL), DURING FACTORY SUBASSEMBLY TESTING THE . RE SHORT CIRCUITED TO EACH OTHER, THIS NAS DUE TO SHORT CIRCUITED CAPACI NERE ALSO FOUND ACKORE THE HOTOR SMITCH, CAUSE DUE TO APPLICATION OF ES AREA MORK BENCH ES NOC OUTLETS MERE FOUND COMMECTED IN REVERSE POLARITY.	C ONCORED ALL ES VDC OUTLETS IN THE ARE	DURING OPERATION. THE PROGRAMMER STOPPED I	CORRECTIVE ACTION NAME, TRILLORS WAS TO COMPANY.
18 JUN 1986	8787EH 848-8787EH	CORRECTIVE ACTION-FAII RE IN COMPONENT AFTER 1 WEN THE ENTIRE 348-ASSE	AUTOPILOT-SQUARE-A/B	FAILURE MODE-CONTANTING DO OVER POSITIVE IN THE R WAS ZEROED. UPON FLIT WAS CONTANTINATED.	CORRECTIVE ACTION-RAYTHEON COMMERCIAL-TYPES. THE AUTOPILOT SERVO AMPLIFIER WILL ALS TRANSISIORS IN THE NAMBRACTURING FINAL CHE MODIFIED TO DEFECTIVE TRANSISTORS.	AUTOPILOT-SQUARE-A/B	FAILURE MODE-SHORT (E) ERE SHORT CIRCUITED TO B WERE ALSO FOUND ACRO AREA MORK BENCH EG VO	CORRECTIVE ACTION-60/	FALLINE MOE-FAIL DUR	CORRECTIVE, MATICAL MAN

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DIFFICULTIES REVIEW-AUTOFILOT STSTEM-SIRBOANE

		The same of the sa	The same of the last of the la		The second name of the second na			
BYBTEN BUB-BYBTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUNGER	VEHICLE DATE DIF	11 E	BITE PRI VENDOR NAME	¥ -		
NUTOPELOT-SQUARE-A/B	BLV-88-04-475X-F CIRCUIT BOARD WIRING	FAR E7-41486-1	******	PACTORY	7E3 66/C	.7		
FAILURE MODE-ELECTRICAL LAIET THAN 300 OMMS. FAIL CORRECT T ACCTOM-6D/C T THROUGH AN POTTING MOLD F	FAILURE MODE-ELECTRICAL WHORT, BIMARY ASSEMBLY WAS REJECTED WHEN IMPEDENCE MEASUREMENT WAS 37 KILCHMS INCIRAD OF LAICY THAN 300 CHMS. FAILURE MAS DUE TO SHORTED MIRING IN THE POTTED MODULE. CORRECT TACKTON-EDVC TOOK CORRECTIVE ACTION ON DECEMBER 3, 1864, INCOMPORATING INTO PRODUCTION USE A NEW PLAST! THROW AS POTTING WING PROCESS FOR PANIFACTURING BIMARY ASSEMBLIES. THIS PROCESS WILL PREVENT TRANSMELLEAD ENDS. ON TOOKEL AS FOR THE OR ADJACENT WIRES DANING.	WEN IMPEDENCE MEAN FOTTED MODILE.	INTERENT NA	8 37 KII DUCTION	MAS ST KILCHMS INSTEAD OF GR PRODUCTION USE A MEW PLASTIC PREVENT TERMINAL LEAD ENDS FR	\$ <u>2</u> £		
. <	GROUTT BOARD CAPACITOR CLACULT BOARD CAPACITOR CLOURING PAT, FRI, AND BLI TEMPERATURE-VIBRATION, POMER BAITCHES INTERMITTENTLY ON AND OFF. A MENE RECEIVED LATE, CAPACITOR C-2 BAEARD OFF A BOOT FROM PINS 6 AND 7 OF RELAY A-3 ON CIRCU	UTP-PRT C-VIDRATION, POACR I	640313 6 MITCHES IN	60/C NTERHITTI	YES NO NTLY ON AND OF RELAY 3-3 ON C	 	77	
CORRECTIVE ACTION-AN ECP	CORRECTIVE ACTION-AN ECP FOR REDEBIEN OF UDABAL CIRCUIT BOARD TO BE SUBMITTED TO 850 ON	D TO BE SUBMITTED		ON AN URGEN	AN UNGENT (RENDICK) BASIS BY		CONTRACTOR OF THE PROPERTY OF	ें च में भी भ
ACIONALOT-BRUANE-A/B	6942687.1 CIRCUIT BOARD CAPACITOR	UTP-PRT	* #1607) / O*	46. NO	•	13994	
FAILIRE WOE-OPEN-ELECTR ALSO, CERTAIN DISCRETES REFER TO FRR 144A.	FAILLME "YDG-OPEN-ELECTRIC-DURING PAT, PRT AND BLT TEMPERATURE-VIBRATION, POMER SYTICHEB INTERHITTENTLY ON ALSO, CERTAIN DISCRETES WERE RECELVED LATE, CAPACINOR C-1 NAD A BROKEN LEAD AT PIN 7 OF RELAY R-3 ON BOARD EFER TO FIR 144A.	RE-VIBRATION, POÆU D A BROKEN LEAD ÅT	SMITCHES	INTERNIT	B INTERNITTENTLY ON AND OFF. RELAY K-S ON BOARD USABAL.	***		
CORRECTIVE ACTION-AN ECP	CORRECTIVE ACTION-AN ECP FOR RELIGIION OF UDASAL CIRCUIT BOARD TO BE SUBMITTED TO 33D ON 9.7745.	ID TO BE BUBMITTED	A NO dat o	N URGEN	AN LRCENT (REWORK) BASIS BY	*		
NUTOFILOT-BRIANE-A/B	BOACEST.1 RELAT K-8	C16-781 86-73200-067	. 810078	y/\$	YES CHICK SMITCH + HO SIGNAL RESHLPSE	•		
FAILURE MODE-FAILURE DUM ON AND OFF, ALSO, CERTAIN 44A.	FAILUNE MODE-FAILUNE DURING OPERATION-DURING PAT, PRT AND BLT TEMPERATURE-VIBRATION. ON AND OFF, ALSO, CERTAIN DIBCRETEB WERE RECEIVED LATE, THE RELAY ROTOR FOR BMITCH &1. 44A.	.T TEMPERATURE-VIBRA IELAY ROTOR FOR BUIL	7104, POAR CH 11 MAB	R 8WITCH	POMER BNITCHES INTERNITIONILY MAS MANGING UP, REFER TO FRE 1	7.8		
CORRECTIVE ACTION-AN EC	COMMECTIVE ACTION-AN ECP FOR MEDIZZION OF UBABAI CINCUIT SOAND TO BE SUBMITTED TO ASD ON AN UNGENT INCUONKI BASIS BY	ID TO BE BURNITED	7 80 OS 0.	N CASCA	(REMORK) BASIS BY	À .	`	
Angle detainment taksimispilainingan samanan sa samanan samanan samanan samanan samanan samanan samanan samana	indicates of destroyable desirency promises "Waterparency of Paul Commission of Company of Commission of Commissio							

CENERAL DYNAMICS CONVAIR DIVISION

13 JUN 1886

UIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME

SEAZEST.1 CIRCUIT MOND-CAPACITOR
FAILUME HODE-SHORT-ELECTRIC-GURING PAT, PRT AND SLT TEMPERATURE-VIBRATION, POMER SMITCHEG INTRRITTENTLY ON AND OFF . ALSO, CERTAIN DISCRETES MERE RECEIVED LATE, AU INTERHITMANT SHORT WAS FOUND IN TANTALUM CAPACITOR C-B ON BOARD ATA 3. THE CENTER HOLE OF THE TANTALUM DISC MAS GYF CENTER BY SASE INCH, REFER TO FAR 144A.
CORRECTIVE ACTION-ECP FOR REDESIGN OF CIRCUIT BOARD USABAL AND INCORPORATE NEW RELAY TO BE SUBMITTED TO SSD ON AN Gent (Rimork) Sabib By 9/7/65.
69A2697.1 RELAY K-3
FAILURI MCDC-OPEM-ELECTRIC-DURING PAT, PRI ALSO CERTAIN DISCRETES MERE RECEIVED LATE.) FRR 144A.
N ECP FOR REDESIGN OF USABA! CIRCUIT BOARD INCLUDING NEW RELAY TO BE SUBMITTED TO 850 ON AN URGE.
69AZ697.3 Circuit Board-Relistor 3-39
FAILURE HUDE-FAILURE DURING CHERATICM-DURING PAT, PRT AND BLT TEMPERATURE-VIBRATION. PONER SMITCHES INTERMITTENTLY ON AND OFF. ALSO, CERTAIN DISCRETES MENE RECEIVED LATE. RESISTOR R-38 MAS MISSING FRO) CIPCUIT BOARD USATAE HIGH RF EN 2 ASSEMEBLY. REFER TO FRA 144A.
MUFACTURING MAS NOTIFIED
SLV-88-04-4728F BUITCH, HIG. POMER THREE
OLERANCE, THE HIGH POWER THREE ABBEMBLY WAS REJECTED FOR EVIDENCE OF OVERHEATING ON THE CIRCUI COMMECTED TO PINS 1 AND 7 OF RELAY K1, NO PUNCTIONAL FAILURE WAS REPORTED.
CPICIUNCIES IN THE SS-41001-819 PROGRAMMER WERE KNOWN TO CAUSE THIS OVERNEATING, THESE DEFICIENC

11 JUN 1966

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORNE

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SITE PRI VENDOR MANE				CAL.MAC.CORP. GC703A	ALCE TO BE FOLCS IN THE POTTING COMPOUND ARO QUALITY COATROL BY THE VENDOR. THE SPECIFIC AT THE CAUSE OF THE FAILURE WES PROBABLY FIROMAD THE INSERTS AND IN THE POTTING MATERISTICALINE WESTERN AND IN THE POTTING MATERISTICALINE WESTERN AND THE PROTEING WATERISTICALINE WESTERN AND THE PROTEING WATERISTICALINE WATE	MEING INTRODUCED TO THE MO ALL MAGNETIC CONFORENTS TO	YES EDCLIFF NO 10469E-1	SELF-YEST DUR!		y/ 9	ATTRIBUCED THE	
PRI		# Q		ភូទ	POTTIN VENDOS VILURE IN THE	INTRO CHECTIC	<u> </u>	TE N. A.		ž ž	1 Page	
\$17E		FACTORY	ė) 3	H THE P	36.14 3.1.14	y 3	O ACTU		PACTORY	K. AW.	
VEHICLE DATE DIF		64030E	Was Burner	\$050 79	D BE FOLCS IY CCATROL. IY CCATROL. WE CAUSE OF THE INSERT	NECTION OF	640550	H PAILED T		640886	AT ZERO 12. PINS WAS C.	
DIF DATA BOUNCE PART NUMBER	OGRAHMER.	FAR 27-41802-801	BECAUSE DIODE CR-1	UTP-PET E7-04170-3	AND MARSINAL QUALITY AND MARSINAL QUALITY AND RETLIED HAT THE SMALL VO'DS ANOUND	IN EXTRA VACUMU CYCL IN CLOSER VISUAL IN: IA-E-273 BLFF A.	UTP-ETT E7-04099-1	III, VIBRATION BAITK KIB SHEEP, SHO Y AL		を は の ・	TCH P SAME A NO-60	
TEST/REPORT NIVEER FAILED COMPONENT NAME	ECP TOAT WHICH CREATED THE DABH BED PROGRAMMER.	LV-88-04-4718C FiltR/DicoE	URING OPERATION. THE FILTER WAS REJECTED SECAUSE DIODE CR-7 WAS BURNED. ONE. NO FAILURE AMALYSIS WAS PERFORMED.	R7-5962 TANATORER	FAILURE WIDE-OUT OF TOLERANCE, DURING VISUAL INSPECTION TEST THERE APPEARED TO BE FOLCS IN THE POTTING COMPOUND AND UND BOTH THSERTS. THIS WAS CAUSED BY POOR POTTING TECHNIQUE AND MAREINAL QUALITY CCATROL BY THE VENDOR. THE SPECIFIC CAUSE OF THE FAILURE IS NOT KNOWN. CAUSE OF THE FAILURE IS NOT KNOWN. CORRECTIVE ACTION-THE VENDOR WAS CONTACTED BY MCAR 6340-64 AND RETLIED. MAT THE CAUSE OF THE FAILURE WES PROBABLY F ROTHING OF THE EVOXT MOLDIES CHANGE FORTING MATERS	AL. THE VEHOOR STATED THAT THE MOLDING MATERIAL MILL BE BIVEN EXTRA VACUMM CYCLING BEFORE LDS. 407C RECEIVING INSPECTION WAS CONTACTED BY AND TO PERFORM CLOSER VISUAL INSPECTION OF PREVENT OUT OF TOLERANCE CONDITIONS BEING ACCEPTED. REF. 634-2-273 BLFF A.	69AZ687.2 ACCELERGAETER BATTCH	FAILURE MODE-FAILED TO OPERATE AT PRESCRIDED TINE, DURING ETT, VIBRATION BMITCH FAILED TO ACTUATE IN SELF-TEST DURI NG 8TH X AXIS VIBRATION SHCEP, SWITC ALSO FAILED IN CTH X AXIB SHEEP, 383 Y AXIB BMEEP AND 11TH Y AXIS BMEEP ON 640 3GB: 640318, AND 640416 DUE TO OVCHREATING OF RELF-TEST COIL. REFIR TO FRR EGS.	CORRECTIVE ACTION-ECP 7837 TO MODIFY BELF-TEST CIRCUIT.	SLV-88-04-4704-F CIRCUIT BOARD CONNECTOR	FAILURE MODE-CONTANINATION. THE LOM-POMER BNITCH MODIALE BNITCH I GAME A MO-60 AT ZERO TIME, AMALYBIB ATTRIBUIED THE FAILURE TO CONTAINATED PINS OF THE CIRCUIT BOARD COMMECTOR. CONTANINATION OF PINS WAS CAUBED BY PRESSING STYROFOAN TO LET PINE TOO BOOM AFTER CLEANING WITH CHLOROTHENE.	
AVSTEN BUD-STRTEN	ILS MENE CORNECVED BY EC	AUTOPILOY-SEUARE-A/B PROGRAMMER	FAILURE MODE-FAIL DURING CORRECTIVE ACTION-MOME.	AUTOPILOT-SQUARE-F/B	FAILURE WIDE-OUT OF TOLERANCE, DUR UND BOTH THSERTS, THIS WAS CAUSED B CAUSE OF THE FAILURE IS NOT KNOMM, CORRECTIVE ACTION-THE VENDOR MAS CARTHING OF THE EFOXY HOLDING CURPOL	AL. THE VEHOOR STATED TH LDS CONC RECEIVENC INSPER PREVENT CUT OF TOLERANC	AUTOP1LOT - SQUARE - A/E PROGRAMMER	FAILURE MODE-FAILED TO OPERATE AT PRI NG STH X AXIS VIBRATION SMEEP, SHITC SGB: \$40318, AND \$4041\$ DUE TO OVCRINE	CORRECTIVE ACTION-ECP 7.	AUTOFILOT - BAUARE - A / B PRC: A HARER	FAILURE MODE-CONTANIMAT FAILURE TO CONTANIMATED TO LET PINE TOO BOOM AF	

BENERAL DYNAMICS CONVAIR DIVISION

11 JUN 11864

18 2004 1884	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	ILOT SYSTEM-AIRBOR	¥		ARTHUR THE PROPERTY OF THE PROPERTY AND	_
BYBIEN BUB-BYBIEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE BITE	O THE	BITE PRI VENDOR NAME TIME GIF OTH VENDOR PART NO	
CORRECTIVE ACTION-INSPEC	CORRECTIVE ACTION-INSPECTION PERSONNEL MERE RE-INSTRUCTED TO COMDUCT A ONE-HUME PLACE FOR CONTAMINATION PRICE TO STORAGE OR ASSEMBLY INTO THE TOP PACRACE.	RE-INSTRUCTED TO COMDUCT A OME-HUMBRED PERCENT VISUAL INSPECTION OF MOD OR ASSENDED INTO THE TOP PACKAGE.	DRED PERCENT YESU	11 110	PECTION OF NOD	*****
AUTOFILOT-SQUARE-A/B	6D/AA6U83-001-4/FC-CO-02-0013-01C	COMPOST TE-PACTORY 27-44536-3	£450 640220	45.0	YES 60/C	*******
FAILURE HODE-ERRATIC OPE D BINARY CLOCK PIR.SES AFT	FAILURE MODE-ERRATIC OPERATION, MISM POWER BUITCH 13, MONITORED ON CHAMMEL 8 OF MIDMESTERM RECORDER NO. 2, INDICATE D BINARY CLOCK PULSES AFTER ACTIVATION AT STASING PLUS 3.1 SECONDS.	RED ON CHAMBEL S O	F MIDNESTERN RECO	H H	O. E. INDICATE	
STATEM EFFECT-MOME.						
WENIGUE EFFECT-COMPOSITE	MEHICLE EFFECT-COMPOSITE RESCHEDULED. SYSTEM AND COMPOSITE RETESTING REQUIRED.	ETESTING REQUIRED.				
CORRECTIVE ACTION-REPLACED PROGRAMMER	ED PROGRAMMER.					
AUTOFILOT-SQUARE-A/B	69A3064 ARM-BAFE BMITCH	UTP-PET #7-02047-1	\$40220 60 /C	ž g	YES KINETICS NO M934"1	493672
FILLURE MODE-OUT OF TOLES 24 RETER TO FMR 837, LARG	TOLERANCE, READING OF CONTACT REJISTANCE WAS OUT OF SPEC. SINILAR FAILUNES ON SAME PART ON SADE Largest out of Tolerance Reading was 330 millivolts (spec. Reguinement is 200 millivolts).	MILLINGLIS (SPEC.	SPEC. SIMILAR FAILUMES ON SAME PART ON (SPEC. REGUIREMENT IS EGO MILLIMOLTS).	¥ 0	E PART ON 6402 LIVOLTS) .	
CORRECTIVE ACTION-ECP TS: TOMER: CIC ESSAT WILL BE	CORRECTIVE ACTION-ECP 7690 (TO CHANGE MAXIMUM ALLOMBLE VOLTAGE DROP TO 500 MILLIVOLTS) 1448 DISAPPROVED BY THE CUS ONES: CIC ERSEP WILL BE RESUBMITTED.	.TAGE DROP TO 500 H	ILLI WOLTS) 1448 DI	M PPRO	WED BY THE CUS	
AUTOFILOT-SQUARE-A/B	A-A8-A4-4664-F BILICON CONTROL RECTIFIERS	FAR E7-44536-3	E43D FACTORY 640E18	ž č		#5 en ee
FAILURE MODE-OUT OF TGLES MG ON THE OUTPUT BUITCH IS MALL IN ANTILLUDE (ABOUT (H HAD BLIGHTLY HIGH FOREMA	FAILURE MODE-OUT OF TOLERANCE. TWO PROGRAMMERS WERE GELECTED DURING CHECROUT BECAUSE OF BINARY CLOCK PULSES APPEARS. NG ON THE OUTPUT SHITCH 14 OF DROGRAMMER AND SHITCH 13 OF THE REPLACEMENT PROGRAMMER. THESE BINARY PULSES MERE SHALL IN AMPLITUDE (ABOUT O.R VOLTS PEAK-TO-PEAK), AMALYSIS ATTRIBUTED THE FAILURE TO SILICON CONTROL RECTIFIERS WHICH HAD BLIGHTLY HIGH FORMARD VOLTAGE DROPS IN THEIR COMDUCTING STATES.	DURING CHECKOUT B THE REPLACEMENT P TRIBUTED THE FAILU STATES.	ECAUSE OF BINARY ROGRAHMER, THESE RE TO BILICON CON	CLOCK SINARY MOL R	PULSES APPEAR! PULSES NERE S ECTIFIERS UNIC	
CORRECTIVE ACTION-ECP 7791 AUTHORIZED THE USE OF "S PROGRAMMERS. THE SMITCH 16 CIRCUIT 18 THE CHLY		THE BETTER 35-D4361 SPECIFICATION SCR (CIRCUIT SENSITIVE TO THIS FAILURE MODE.	TION SCR (EMBBS) LURE MODE.	8	2 TCH 16 IN 95.V	
autofilot-square-a/b programmer	60/A AGU43-GD1-6/FC-CO-G1-0013-016 COMPOSITE-FACTORY BMITCH E7-44536-3	COMPOST TE-FACTORY 27-41536-8	8430 640217	¥ 6	YES 60/C	

FAILURE MODE-ERRATIC OPERATION, NIGH FUMER PYTICN 12, MONITORED ON CHANNEL 18 OF MIDNESTERN RECORDER NO. 2, INDICAT ED BINART CLOCK FULSES AFTER PEINE ACTIVATES AT 37261M3 PLUS D.1. SECONDS.

STRIEM EFFECT-MOME.

GENERAL DYNAMICS CONVAIR DIVIBION DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

CONVAI

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SYSTEM SUB-SYSTEM	TEST/AEFORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	817E 718E 01F	9 0 8 1	VEHICLE SITE PRI VENDOR NAME DATE DIF THE DIF OTH VENDOR PART NO	
VENICLE EFFECT-COMPOSITE	VENICLE EFFECT-COMPOSITE RE-SCHEDULED. STATEM LEVEL AND COMPOSITE RETESTING REQUIRED.	POSITE NETESTING RE	OUTREG.				*****
AUTOFILOT-SQUARE-A/B	LY-99-D4-489E-F MILICON CONTROL MECTIFIER	FAR 87-41635-8	1350	FACTORY	÷ 3		04070
FAILURE HODE-OUT OF SPECI D THAT THE MENS WOULD HO -07883.	FAILURE MODE-OUT OF SPECIFICATION, TWO HIGH-POWER & ASSEMBLIES HAD SWITCH IS FAIL TO OPERATE PROPERLY. AMALYSIS FOUND THAT THE SKRS WOAD NOT STAY ON AT LOM MOLDING CURRENT LOADS. BOTH SCRS DID NOT MEET ASTROMAUTICS SPECIFICATION & Y-07883.	ADS. BOTH SCRS DID ADS. BOTH SCRS DID SS-DANS. SPECIFICAL	ALL TO OPT MOT MEET 1	SATE PRO STRONAUT:	10 a a	PECIFICATION R	
S PROGRAMERS, THE SMITCH AUTOFILOT-SQUARE-A/B	STRICKLING ALLORE MATCH 16 CIRCUIT 18 THE ONLY CIRCUIT BENSITIVE TO THIS FAILURE MODE. UTCPILOT-SAUME-A/B A-96-04-4428F FAR 87-41001-617 64012P NO NO NO MOGRAPHER	SITIVE TO THIS FAIL FAR E7-41001-617	.URE HODE. 55 640129	£18	20	YES GO/C	098448
FAILURE MODE-FAILED DURI: CORRECTIVE ACTION-MOME.	DURING CPERATION. BMITCH 19 HAD NO CUIPUT IN THE ARMED OR SAFE POSITION. WE. THE FAILURE WAS NOT COPPIETED.	UT IN THE ARMED OR	BAPE POBL				
AUTOPILOT - SQUARE-A/B	A-88-74-1893-F CIRCUIT BOARD CAPACITOR	FAR E7-41434-803	1107	FACTORY	ë g		****
PAILURE HODE-SHORT (ELECT). THE PITT LD TAPPING OF THE PITCH I ASSEMBLY RE CITOR WHICH WAS POORLY MANUFACTURED.	ICLECT). THE PITCH I ASSEMBLY FAILED THE TRANSISTOR SHOCK TEST PER PROCEDUME RY-REARS BOOK R. MI TCH I ASSEMBLY RESULTED IN OUTPUT FLUCTUATION. AMALYSIS ATTRIBUTED THE FAILURE TO A SKONTED CAPA LY MAMARCTURED.	TRANSISTOR SHOCK I	EST PER PRESENTED AT	OCEDURE :		PROCEDURE ET-ESSES BOOK E. HE THE FAILURE TO A SYCRTED CAPA	
CORRECTIVE ACTION-NOME.							
AUTOFILOT-SAUARE-A/B PROGRAPHER	LV-6D-D4-4821F BMITCH 17	PAR 27-75378-3	26.50 6.6130	Š	Şg		******
FAILURE MODE-ELECTRICAL OF EFECTIVE BOLDER CONNECTION.	FAILURE MODE-ELECTRICAL OPEN, SHITEK ST MAD INTERNITTENT OUTPUT MITH PROGRAMMER IN THE ARMED POBITION CAUSED BY A PECTIVE BOLDER COMMECTION.	ITEUT KITH PROGRAMME	A 14 THE .	INMED POS	5	CAUSED BY A D	·
CORRECTS WE ACTION-NOME.		ngerfenoming begrete for antiscription on the process management of the August States of the States			I		
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SENERAL DYNAMICS CONVAIR DIVISION

18 JUN 1888

DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORNE

		PORTE - PROPERTY - PRO	Ě				
BUB-STER	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART HUNDER	VENICLE DATE DIF	VEHICLE SITE PRI	PRI VENDOR NAME OTH VENDOR PART NO	ž :	
AUTOPILOT - BEUARE - A/B PROGRAMMER	LV-98-04-4638F CIRCUIT BOARD	FAR 88-41001-001	1350	FACTORY	7E8 50/A NO		10000
FAILURE MODE-CONTABINA LE IN THE MARKESE TRAY.	FAILURE MODE-CONIAMINATION, AUTOPILOT PROGRAMMER FAILED THE SHOCK TEST AND IS ATTRIBUTED TO A CONTAMINATED RECEPTAC Le im the harmess tray, identity of contaminant is mot rnomm.	THE SHOCK TEST AND IS	ATTRIBUTES	10 A CO	ITAMINATED RECE	(PTAC	
CORRECTIVE ACTION-IN R FOR SIT DIFFERENT PART SHEET MATERIAL WITH MA LICATION OF THE SITMO F	CORRECTIVE ACTION—IN REPLY TO RAR LV-89-04-3071, GD/A REVISED MR E1.38.E MHICH BAID-1. DISCUNTINUE USE OF STYROPOAN FOR SIT. DIFFERENT PART HARKESS TRAYS. E. MAAP THESE PARTS WITH UMETHANE POAM SHEET OR POLYETHYLENE SHEET AND SECURE SHEET MATERIAL WITH MASKING TAPE.S.CAUTION-PIN CONTACTS SHALL BE THOROUGHLY DRY AFTER ROLVENT CLEANING PRIOR TO APP ICATION OF THE SITRO FOAM BLOCK GNTO THE PINS.	VISED HS E1.36.2 WHICH B WITH UMETHANE FOAM S BHALL BE THOROUGHLY DM	SAID-1. O HEET OR PO Y AFTER M	ESCONTING LYETHYLES LVENT CLE	RE USE OF BITHE RESHEET AND SE ANIMO PRIOR TO	ROFOAN SECURE TO APP	
AUTOFILOT-SQUARE-A/B	LV-9D-04-4423F 8471CH 18	FAR 27-72572-3	2850 640117	£-3	YES NO		
F TLURE WIDE-FAILED TO FAILURE HAS CAUSED BY CORRECTIVE ACTION-60/C	F "LURE WIDE-FAILED TO OPERATE AT THE PRESCRIBED TIME, SMITCH 13 WAS RECEIVED 16 SECONDS LATE DURING LOOP TEST. FAILURE MAY CAUSED BY A DEFECTIVE ACR EM663. THE BCR MOULD MOT PASS 60/C SPEC 27-07093, TURN ON VOLTAGE TOO LOM- CORRECTIVE ACTION-60/C SPEC 27-07993 WAS IMPOSED ON THE EM883.	TINE, SMITCH 13 WAS RECEIVED 16 SECONDS LATE DURING LOOP TEST, THE SCR MOULD HOT PASS 6D/C SPEC 27-07893, TURN ON VOLTAGE TOO LOM. ON THE ENGRS.	16 SECOND1 R7-07993.	LATE DU	11N6 LOOP 1E37.	ž,	
AUTOPILOT-SQUARE-A/B	St.V-99-04-4591F HARKESS, PITCH TNO ASSEMBLY	FAR 27-41435-601	640103	FACTORY	YES NO		181800
FAILURE MOE-ERRATIC OF GRANDER, THE PITCH TWO ASBY. CGREETIVE ACTION-MOME	FAILURE MODE-ERRATIC OPERATION, PITCH VOLTAGE APPEALED INTERMITTENT DURING PRODUCTION VIBRATION OF AN AUTOPILOT PRO IN THE PITCH TWO ASSEMBLY WAS SUBMITTED FOR FAILURE AMALYSIS AS A CAUTIONARY MEASURE. NO DISCREPANCY MAS FOUND IN THE PITCH TWO ASSY. CORRECTIVE ACTION-NOME, FAILURE MAS NOT COMFIRMED	NTERMITTENT DUBING PRC AMALYBIB AB A CAUTION	DUCTION VI	E. NO DIS	Y AN AUTOPILOT KREFANCY MAB P	0 g	
AUTOFILOT - SGUARE - A/B PROGRAMMER	PPASOG4 ARN-BAFE SWITCH	UTP-PET E7-02047-1	#1010F	5/09	YES KINETICS HO H934-1		CB3665
FAILURE MODE-OUT OF TO T DEG F, AND PLUB 180 D EME FROM 45 TO 11E MILL D DUMING P.E.T. TEST, N	TOLERAMCE. DURING PROOF CYCLE C, WITH SWITCH IN BAFE POSITION, AT -30 DEG PLUS SO DEG F, PLUS T DEG F SEVERAL VOLTAGE READINGS WERE OUT OF TOLERANCE. USING S AMPS OUT-OF-TCLERANCE READINGS W LINULTS (SPEC, REGUIREMENT 40 MILLIMOLTS AT S AMPS, ZOO MILLIMOLTS AT 25 AMPS, FAILUNE OCCURRE NEFER TO FRE 107, OTHER FAILUNES ON SAME PART ON \$40103 AND \$40120.	H SWITCH IN BAPE POSITY OUT OF TOLERANCE, USI WOLTS AT 5 AHP3, EGO N SANE PART ON MADIDS A	ION, AT -1 WG 5 AMPS ILLIVOLTS ND 8401ED,	D DEG PLI	18 50 DEF F, PL LERANCE READIN 18. FAILUME OCC	7 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
CORRECTIVE ACTION-ECP OWER. GIG REDET WILL BE	P 7480 (TO CHANGE MAKINUM ALLOMBLE VOLTAGE GROP TO SOG MILLIVOLTS) WAS DISAPPROVED BY THE CUBT OF RESUBMITTED.	VOLTAGE CROP TO SOG ME	111001181	148 01841	PROVED BY THE	CUNT	
					PAGE 0163	0163	

GENERAL DYNAMICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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8787EH 8.00-8787EH	TEAT/REPORT NUMBER FAILED COMPONENT MANE	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIP	BITE TIME DIF	BITE PRE VENDOR HANE TIME DEP OTH VENDOR PART NO	
AUTOFILOT-BELARE-A78 PROCRAHMER	A-88-D4-4473-C CIRCUIT BOARD	7.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	63123	FACTORY	YE& NO	****
FAILURE MODE-FAILED DU AAREMBLY DID NOT WERIFY	FAILURE MODE-FAILED DURING OPERATION. THE PITCH & ASSEMBLY FAILED DURING VIPRATION TEST. BUSSEBUENT REIEST OF THIS ASSEMBLY DID NOT WERIPY THIS REPORTED FAILURE.	Y FAILED DURING VIPRA	TEON TEST.	PUSSEGUE	NT RETEST OF THIS	
CORRECTIVE ACTION-NOME	CORRECTIVE ACTION-NOME. NO PATLURE AMALYBIB MAB PERFORMED BECAUSE THERE MAB NO CONTRACTURAL COVERAGE FOR E SERIES U Dating.	SECAUSE THERE WAS HE	CONTRACTO	MAL COVES	AGE FOR E SERIES U	
AUTOFILOT - SQUARG-A/B	A-39-04-4397F CIRCUIT, BINARY ASSEMBLY	FAR 27-41496-1	631214	PACTORY	7E8 60/C NO	
FAILURE MODE-SHORT, ELECTRICAL, THE BOLDER ON THE PRINTED CIRCUIT BOARD.	FAILUME MODE-SHORT, ELECTRICAL, THE MODULE MAS REJECTED FOR AM INTERNAL BHORT CINCUIT, THE BHORT MAS DUE TO EXCESS OLDER ON THE PRINTED CIRCUIT BOARD.	OR AN INTERNAL BHORT	CINCUIT. 1	HE BHORT	MAS DUE TO EXCESS	
CORRECTIVE ACTION-NOME.	ů					
AUTCPILOT-SQUARE-A/B	A-99-04-4648F BINANY CLOCK TRANSISTOR	FAR 27-41445	631213	Factory	TES GD/A NO	• • • • • • • • • • • • • • • • • • • •
FAILURE MODE-SMORT (ELECT . OPERATION WAS INTERHITTE ANSISTOR INTERNAL ELEMENTS PROCESS MAY BE IMADEGUATE.	FAILURE HODE-SHORT (ELECTRICAL), COUNTER ASSEMBLY FOUND TO BE VIBRATION SENSITIVE DURING PRODUCTION VIBRATION TESTS, OPERATION WAS INTERHITYENT WHEN SHAREN BY HAND. FAILURE IS ATTRIBUTED TO LOOSE GOLD FLAKES SHORT-CIRCUITING THE TRANSISTOR INTERNAL ELEMENTS. EXACT CAUSE OF THE TRANSISTOR MEABER IS NOT KNOWN, CURING PROCESS MAY BE INADEGUATE.	O DE VIBRATION SENSIN 13 ATTRIBUTED TO LOOS AD PLAKING OFF THE TR	I'VE DURING IE COLD FLA IANSISTOR P	RES SHORTS	ON VIBRATION TESTS -CIRCUITING THE TR NOT KNOWN. CURING	
CCARECTIVE ACTIONPER D IN CR PRICR TO 1961 ENT EDX MAGNIFICATION V GO/A CONDUCTED A RANDOM RED IN 1961 CR EARLIER.	CCRECTIVE ACTIONPER RAR A-99-04-3866 GD/A PURCED STOCK OF ALL TYPE ENG97 AND RIMSE RHEEM TRANSISTORS MANUFACTURE D IN OR PRIOR TO 1961. PER RAR A-99-04-3867, FFFECTIVE JANUARY 8 1964, VENDOR INITIATED A SPECIFICATION FOR 100 PERC ENT 20X MACHIFICATION VISUAL INSPECTION OF BILICON TRANSISTORS IMPERDIATELY DEFORE FINAL SEALING. ON MARCH 31, 1964 GD/A COMDUCTED A RANDOM SAMPLING OF 3600 RHEEM TRANSISTORS TYPES ENGST AND ENGSS IN STOCK. MONE MERE FOUND MANUFACTU	OF ALL TYPE EM97 AND	D RMS6 REINITATED A	EEM TRANS . SPECIFIC SEALING. NOWE WE	ISTORS MANUFACTURE ATION FOR 100 PERC ON MARCH 31, 1964 RE FOUND MANUFACTU	
AUTOFILOT-BEUARE-A/B	LV-98-04-4678-F TRANSI STOR	FAR E7-41001-631	1950	ETR	YES GD/C	
FAILURE MODE-FAIL TO C ME LIGHT IN THE BLOCKHO ANALYBIB COWTRMED THE DID NOT PEPEAT THE FAI T A BO WOLT COLLECTOR-T	FAILURE HODE-FAIL TO OPERATE AT PRESCRIBED TIME, THE PROGRAMMER WAS REJECTED WHEN, DURING SYSTEM TESTS, THE ZERO-TI WE LIGHT IN THE BLOCKHOUSE FAILURE TO ILLUMINATE. THE PAILURE WAS REPEATED ON THE BASE GYROSCOPE LABORATORY TEST SET. ANALYSIS COMPIRMED THE FAILURE, HOMEVER, THE PROGRAMMER CORRECTED ITSELF ABOUT FIVE MINUTES AFTER BEING STARTED AND DID NOT PEPEAT THE FAILURE, DETAIL AMALYSIS COULD FIND NO DISCREPANCY OTHER THAM A TRANSISTOR (RHAST) WHOSE ICBO, A 7 A SO VOLT COLLECTOR-TO-BASE, MAS OUT OF SPEC.	HANNER WAS REJECTED V RE WAS REPEATED ON TH CARECTED ITSELF ABOUT DISCREPANCY OTHER TH	HEN, DURIN HE BASE GYR FIVE MENI	16 3737EH 103COSE LA 11ES AFTER 113TOR (24	TESTS, THE ZERO-TI BORATORY TEST SET. BEING STARTED AND 4871 MHOSE ICBO, A	

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		DIFFICULTIES REVIEW-AUTOPILOT BYSTEM-AIRBORME	DPILOT BYSTEN-AIRBOR	¥					
	8787EH 848-8787EH	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE DATE DIF	117E	A TO	VENDOR NAME	NAME ART NO	
	CORRECTIVE ACTION-NOME.				,				
	AUTOPILOT-BRURE-A/B PROGRAHHER	GBAEBB? ACCELEROMETER	UTP-PRT R7-04099-801	431189	5/ 6 3	3 0	ED CLIFF 108898-1		***
	FAILURE MODE-FAILED TO T ACTUATE AT 1000 CP8. A THE BELF-CHECK COIL. RE	FAILURE WODE-FAILED TO CHEKATE AT PRESCRIBED TINE, DURING PRI Z AXIS HIGH TEMP-VIBRATION TEST THE SPECIMEN MOULD NO I ACIUATE AT 1000 CPS. ALSO AT ROCH AMBIENT COMDITIONS THE NELF CHECK OPERATED INTERHITTANTLY DUE TO BELF HEATING OF THE BELF-CHECK COIL, REPER TO FRR 074.	PRT Z AKIS HIGH TEDP Nelf Check Operated	-VIBRATION	TEST THE ITLY DUE	10 BE	IMEN NO	7 € 0 € 0 € 0 € 0 € 0 € 0 € 0 € 0 € 0 €	
	CORRECTIVE ACTION-ECP 1	CORRECTIVE ACTION-ECP 7857 TO NODIFY BELF-TEST CIRCUIT.							
	AUTOPILOT-SQUARE-A/B PROGRAMMER	LV-9D-04-4574-F COMMECTOR US-15	FAR 81-53900-718	, 921159	KTR	7. G			****
	FAILIRE MODE-LEAK, EXTERNAL, THE AUTOFILOT ECTOM. TEATS CONFIRMED THE LEAKAGE ENCEEDED	EXTERNAL. THE AUTOPILOT PROGRAMMER FAILED WIEN IT LEAKED GASCOUS MITROGEN THROUGH THE US-J3 COMM ED THE LEAKAGE EXCEEDED THE ALLOAMBLE 1 CUBIC INCH PER HOUR AT 30 PAIG.	PROGRAMMER FAILED WHEN IT LEAKED GASCOUS NITROC THE ALLOWABLE I CUBIC INCH PER HOUR AT 30 PRIS.	SECUS MITRO	CEN THRO	<u>-</u>	7-83 H	MAOD E	
	CORRECTIVE ACTION-FLIDBON #.10 13 STANDARD PROCEDURE NO ADDITIONAL CORRECTIVE	CORRECTIVE ACTION-CLICABORD (RUBBER CENENT) WAS APPLIED TO THE LEAKING CONNECTOR, SINCE PLICABORD 4.10 IS STANDARD PROCEDURE FOR REPAIRING CONNECTORR FOUND LEAKING, AND THIS METHOD IS FELT TO BE NO ADDITIONAL CORRECTIVE ACTION,	THE LEAKING COMMECTO LAKING, AND THIS MET	A, BINCE PL	SINCE PLICBOND APPLIED PER MS 82.1) IS FELT TO BE ADEQUATE, THERE WAS	PP. LEE	APPLIED PER M3 82.1 ADEQUATE, THERE MAS	3 88.1 RF 143	
	AUTOFILOT-SQUARE-A/B PROGRAMMER	A-88-114-4561-F RECTIFIER	FAR 87-93900-060	* ************************************	FACTORY	2 0 X	GENERAL ELECTR IC RN603	CLECTA	****
	FAILURE HODE-OUT OF SPE A BO MILLIAMERE CATHODE W3 ALTHOUGH NO DISCREPAN	FAILURE HODE-OUT OF SPECIFICATION. THE SILICON-CONTROLLED RECTIFIER (SCR) WAS RESECTED WHEN IT MOULD NOT FIRE INTO A GO MILLIAMERE CATHODE LOAD. IT WAS DETERMINED THAT THIS SCR WOULD NOT OPERATE IN ACCORDANCE WITH GDC SPECIFICATION. WE ALTHOUGH NO DISCREMANTACIUMES SPECIFICATION.	RECTIFIER (SCR) WAS SEE WOULD NOT OPERATED IN ACCORDANCE WITH	REJECTED WE E IN ACCORD H THE MANUF	EN ET MOI	2 CO	SPECIF	1MT0 1CA710 M.	
1	CORRECTIVE ACTION-GOC B	CORECTIVE ACTION-GOC SPECIFICATION 27-07993 MAS INCORPORATED IN SLV-3 (69-1650), LV3C (83-050k), AND LV3A (27-0020 Omly, there did not appear to be supplicient justification for meapon system application.	FED IM GLY-S (69-165) FOR WEAPON BYSTEM A	S), LVSC (3	\$-050k),	Q.	LVSA (P	7-0020	
	autopilot-bauare-a/b Programmer	A-A9-04-4383-F ACCLEROMETER	FAR RT-04089-803	631118	PACTORY	2 Q	EDCL1FF		
	FAILURE MODE-BHORT (ELE DIME LEBB THAM THE DEGUI EBISTOR TERMINAL AND THE RATING POINT.	IELECTRICAL). THE ACCELEROMETER SMITCH PAILED WHEN THE INSULATION RESISTANCE WAS REPORTED AS REA CESULRED 10 MECHNAS, EXCESSIVE SOLDER AND INADEBUATE INSULATION RESULTED IN A SHORT SETMEN THE R D THE ACCELEROMETER COVER, THIS POLLOMED REWORK OF THE UNIT BY THE STANDARDS LAS TO RESET THE OPE	AILED WHEN THE 1MSUAT INNDEBUNTE INSULAT REMORE OF THE UNIT I	LATTON REST TON RESULTE BY THE STAN	STANCE TO DANOS LAI	10 TO 1	PORTED BETWEEN REBET T	AB REA THE B	

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CORRECTIVE ACTION-BTANDARDS LAB PERSONNEL MERE INSTRUCTED TO DISCONTINUE REWORKING THESE UNITS. A SURVEY WAS MADE O F CURRENT INVENTORY, ALL UNITS FOUND IN A COMDITION BIMILAR TO THE FAILED UNIT OR OTHERWISE REQUIRING MODIFICATION M ERE RETURNED TO THE VENDOR.		PART HUNDER	DATE DIF TIME CAF		OTH VENDOR PART NO	•
CUARENT SNVENTORT. ALL UNITS RE RETURNED TO THY VENDOR.	B PERSONNEL WERE INSTRUCTED	TO DISCONTINUE REWORL	KING THESE	LWITS. A	REWORKING THESE UNITS, A SURVEY IMS MADE	
AUTOPILOT-SQUARE-A/B A-89-	NITS FOWD IN A CONDITION BINILAR	R TO THE FAILED UNIT OF FAR E7-41858-3	631115	PACTORY	TES NO	***
FAILURE HODE-FAIL DURING OPERATION. THE LOW POWER 1 ASSEMBLY PAILED DURING PRODUCTION VIBRATION TESTING. THE FAILUR E was due to improper operation of Either Transistors G-ED OR G-EP. Both Transistors were damaged during amalysis an D the exact cause of the transistor malfunction could not be determined.	DURING OPERATION. THE LOW POWER 1 ASSEMBLY PAILED DURING PRODUCTION VIBRATION TESTING. THE FAILUR Er operation of Either Transistors g-ed or g-ee, both Transistors were damaged during analysis an A' The Transistor Malfunction coald not be determined.	BLY FAILED DURING PROI OR G-EE, BOTH TRANS! BE DETERNINED.	DUCTION VII STORS WERE	BANTION TO	SSTING. THE FAILL DURING AMALYSIS A	# Z
CORRECTIVE ACTION-NOME. THE EX	THE EXACT CAUSE OF THE PAILURE HAS NOT POUND.	S NOT FOUND.				
AUTOFILOT-SQUARE-A/B A-99-	A-99-04-4563-F ACCELEPONETER SMITCH/TRANSISTOR	FAR E7-04099-3	631113	FACTORY	YES EDCLIFF ND 106692 MCDEL 7 -56A	*****
FAILURE HODE-OPEH (ELECTRICAL). THE ACCELEROMETER BHITCH REPORTEDLY PAILED DURING STANDARD LABORATORY CALIBRATION W Hen the shitch mould hot actuate During a self-test Rum, Failure was caused by the emitter lead of Transistor 6-1 mo T being scidened to the terminal.	(E)ECTRICAL). THE ACCELEROMETER BMITCH REPORTEDLY PAILED DURING STANDARD LABORATORY CALIBRATION W D NOT ACTUATE DURING A SELF-TEST RUM, FAILURE WAS CAUSED BY THE EMITTER LEAD OF TRANSISTOR 0-1 NO THE TERMINAL.	REPORTEDLY PAILED BURN	IIIG STANDAI THE EMITTE	ID LABORA'	TRANSISTOR 8-1 P	30
CORECTIVE ACTION-THE VENDOR IS K MAS CHECKED AND THE POTTING O	THE VENDOR INSTRUCTED HIS INSPECTORS TO PLACE STAMP MARKS DIRECTLY ON POTTING TO INCICATE ALL MOR He potting operation has bitnessed.	PLACE STAMP MARKS DII	NECTLY ON 1	OTTING TO) INCICATE ALL WO	
AUTOPILOT-BBUARE-A/M A-99-	A-99-04-4496-C LCGIC & ABBENBLY-CIRCUIT BOARD	FAR 27-72720-1	631113	FACTORY	YES.	****
PAILURE MODE-FAIL TO OPERATE AT PREDCRIBED TIME, LOGIC & ABSENBLY IN AUTOPILOT PROGRAMMER P/N 27-43801-801 (8/N 308 -0171) FAILED DURING TEST, BATTCH 26 DID NOT FUNCTION AT PRESCRIBED TIME.	T PRESCRIBED TINE, LOGIC & A CH 26 DID NOT PUNCTION AT PR	ABSEMBLY IN AUTOFILOT RESCRIBED TIME.	PROGRAHME	P/N 87-4	06 H/8) 108-1066	
CORRECTIVE ACTION-NO ACTION TAKEN. THIS LOGIC & ASSENDLY WAS PART OF F OPERATIONAL UP-DATE PROGRAM. THERE WAS NO FA ILURE AMALYSIS CONTRACTURAL, COVERAGE.	KEN. THIS LOGIC & ASSEMBLY W	MB PART OF P OPERATIO	OHAL UF-DAT	E PROGRA!	I. THERE WAS NO P	
AUTCPILOT-BEUARE-A/B LV-AS-DA-PROCEAMER RECTIFIES	LV-A8-G4-6588-F RECTIFIES	17.1 日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日	2960	FACTORY	764	
FAILURE MODE-OUT OF SPECIFICATY VAINED AFTER IT HAD TURNED ON.	SPECIFICATION. THE AUTOPILOT PROGRAMMER PAILED DURING SYSTEM TESTS WHEN THE OUTPUT OF SHITCH 17 TURNED ON. IT WAS DETERMINED THAT SHITCH 17, A SILICOM-CONTROLLED RECTIFIER (SCR) FAILED TO WEE	ER FAILED DURING BYBTI TCH 17: A SILICOH-CON	EN TESTA WA	IEN THE OF	JTPUT OF SWITCH S	* u

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

E PRE VENDOR MANE	SPISAB	MY YES SPORSE	1 E7-43901-801 (5/M 111) OGRAM, THERE WAS NO FA	MY YES 001302 MO	WAS REJECTED WHEN IT FAILED EOF324.45, STEPS 13, 14, 15, AND 6.66 TO 6.14 KILCHMS. THE ACTUAL READING WAS 1D KILCHMS. AND	WHICH WAS FOUND ABEGUED TASKS. IN ORDER TO PANIED BY ITS OWN PLAN	MY VES BEGTES	ING WHEN IT INDICATED HESS ON DIODE LEAD WIRE HAPICIENT STRESS RELIE	ME ALL PARTS BEFORE PO E SIMARY ASSEMBLY.	
E VEHICLE SITE DATE DIF	BPECIFICATIONS.	631118 FACTORY	LOT PROGRAMMER P/N	63111E FACTORY	FAILED EOP324.45.	EQUIPMENT, EACH OF SHING THEIR ASSIGN ASSEMBLY IS ACCOM	ESILLI FACTORY	MANUFACTURING TEST 37), MAS OPEN. STR OTTING, DUE TO INS	AREFUL TO RE-EXAMI NTAIN A DAMAGE-FRE	
DIF DATA SOURCE PART NUMBER	THE NAMPACTURERS	PAR FAR E7-7E7ED-1	ASSEMBLY IN AUTOPI RESCRIBED TIME. WAS PART OF F-OPER	FAR CD 27-41498-1	S REJECTED WHEN IT	ST PROCEDURES AND R CARE IN ACCOMPLI Y ASSEMBLIES. EACH	FAR #7-41498-1	OLY FAILED DUMING T DICOE, CR-3 (INA RING ASSEMBLY OR P	INSTRUCTED TO BE C	
TESTARFORT NUMBER FAILED COMPOSENT NAME	SOC SPECIFICATIONS ALTHOUGH IT PASSED TESTS ACCORDING TO THE NAMERACTURERS SPECIFICATIONS. CORPECTIVE ACTIONS APPROPRIATE DESIGN CACARS NEWS REGIEFED TO INCORPORATE THE GOC SPECIFICATION INTO ALL PROGRAMS.	A-99-D4-4496-C CIRCUIT BOARD	OPERATE AT PRESCRIBED TIME, LOGIC & ASSEMBLY IN AUTOPILOT PROGRAMMER P/N 27-ASSO1-801 18/N 111 [EST. SWITCH &? DID NOT FUNCTION AT PRESCRIBED TIME. ACTION TAKEN, THIS LOGIC & ASSEMBLY WAS PART OF F-OPERATIONAL UP-DATE PROGRAM, THERE WAS NO FA	LV-99-04-4531-F MLTIVIBRATOR/BINARY ASSEMBLY DICD E7-41488-1 E CR-E	FAILURE MODE-OUT OF SPECIFICATION. THE BINARY ASSEMBLY WAS REJECTED WHE!! IT FAILED EOFIZA.45, STEPS 13, 14, 13, AND IS DURING 19ASSEMBLY TESTING, THE PROCEDURE CALLS OUT 8.86 TO 8.14 KILCHMS. THE ACTUAL READING WAS 1D KILCHMS. ANA LISS REVEALED DIODE CR-2 HAD BEEN INSTALLED BACKNARDS.	CORRECTIVE ACTION-A REVIEW WAS HADE OF BINARY ASSEMBLY TEST PROCEDURES AND EQUIPMENT, EACH OF WHICH WAS FOUND ADEQU ATE, PERSONNEL CONCERNED WERE CAUTIONED TO EXERCISE GREATER CARE IN ACCOMPLIBHING THEIR ASSIGNED TASKS. IN ORDER TO OBYAIN BEITER CONTROL OVER THE PROCEDURAL ROUTING OF BINARY ASSEMBLIES. EACH ASSEMBLY IS ACCOMPANIED BY ITS OWN PLAN HING PAPER, EFFECTIVE 10 JAN 1964.	LV-99-04-4518-F CIRCUIT BOARD-0100E	CTRICAL. THE BINARY ABSEMBLY REPORTEDLY FAILED DURING MANUFACTURING TESTING WHEN IT INDICATED ALENT TESTING REVEALED THAT THE RESET DICOE, CR-3 (IM437), WAS OPEN. STRESS ON DIODE LEAD MIRE DICOE FAILED EITHER DURING MANUFACTURING ASSEMBLY OR POTTING, DUE TO INSUFFICIENT STRESS RELIE	CORRECTIVE ACTION-ABBENDLY AND INSPECTION PERSONNEL MERE INSTRUCTED TO BE CAREFUL TO RE-EXAMINE ALL PARTS BEFORE PO TITIMS, POTTIMS PERSONNEL WERE REMINDED OF THE HANDLING CARE MECESSARY TO MAINTAIN A DAMAGE-FREE BIMARY ASSEMBLY.	
SYSTEM AGB-SYSTEM	T GOC SPECIFICATIONS ALTHO	FUATHER ACTION HAS BUSTER AUTOFILOT-SAUARE-A/B PROCRAMERR	FAILURE MODE-FAIL TO OPCHATE AT PRE- DOGE) FAILED DURING TEST, SUITCH EY CORRECTIVE ACTION-NO ACTION TAKEN, ILURE AMALYSIS CONTRACTUAL COVERAGE.	AUTOPILOT - SAUARE - A/B PROGRAMMER	FAILURE MODE-OUT OF SPECI 16 DARTHG T-BASSCHOLY TE: LTSIS REVEALED DIODE CR-2	CORRECTIVE ACTION-A REVIE ATE, PERSONAL, CONCERNED I COSTAIN BETTER CONTROL OVER NING PAPER, EFFECTIVE 10.	AUTOFILOT - NEUARE - A/E PROCA AMER	FAILURE MODE-OPEN ELECTRI AN OPEN CIRCUIT, SUBSEQUE) CAUSED THE OPEN. THE DICK F OF THE DICOR LEADS.	CORECTIVE ACTION-ADRENGE TTIME, POTTIME PERSONMEL I	

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990% NOT 88	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	IOPILOT SYSTEN-AIRBOM	¥		-
3747EH 148-1737EH	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE BITE PRI DATE DIF TIME DIF OTH	PRI VENDOR PART HO	2
AUTOPILOT-SQUARE-A/B PROGRAMMER	CT-98-04-113F 91 COE	FAR 85-41001-839	126D ETR	99	***************************************
FAILURE MODE-ELECTRICAL CR-12 IN THE REMOTE BET ED BY A GROUNDED WERE SP	FAILURE MODE-ELECTRICAL OPEN, BWITCH 15 FAILED DURING CHECKOU! OF VEHICLE 1260-THE FAILURE MAS DUE TO AN OPEN DIODE CH-12 IN THE REMOTE BET P/N 27-41368-813. THE DIODE HAD BEEN BURNED BY EXCESSIVE CURRENT FLOW. THE FAILURE MAS CAUS ED BY A GROUNDED WIRE SPLICE IN THE MISSILE HARNESS.	KOUT OF VEHICLE 126E IEN BURNED BY EXCESSI	-THE PAILURE WAS D VE CURRENT FLOW. 1	DUE TO AN OPEN DIODE THE PAILUME NAS CAUS	300
CORRECTIVE ACTION-NOME-	CORRECTIVE ACTION-NOME-IT SHIS RECOMMENDED THE WIRING MARKESS BE REMORKED.	ESS BE REMORKED.			
AUTOPILOT-SAUARE-A/B PROGRAMER	A-99-04-4499-C High-Pomer & Assenbly	FAR 27-41635-5	631104 FACTORY	YES NO	890878
FAILURE MUNE-FAIL TO OP ES 18 AND 17 FAILED TO R	TO OPERATE AT PRESCRIBED TIME, HIGH-POWER E ABSEMBLY FAILED. SMITCH 15 FAILED TO PIRE, AND SMITCH. TO RESE! AT PRESCRIBED TIMES.	CR E ABBENGLY FAILED.	SMITCH 15 FAILED	TO FIRE, AND BW	ğ
CORRECTIVE ACTION-NO AC	NO ACTION TAKEN. THIS HIGH-POWER & ASSENDLY WAS PART OF F-OPERATIONAL UP-DATE PROGRAM. THERE WAS CONTRACTUAL COVERAGE.	GLY WAS PART OF F-OF	ERATIONAL UP-DATE	PROGRAM. THERE	0 4
AUTOF ELOT - SQUARE-A/B	A-99-04-4553-F TRANSFORMER	FAR E7-04174-3	631102 FACTORY	YES CALIFORNIA MAG- NO NETIC CONTROLS 6CY0713	MAG BRESTO
FAILURE MODE-OFEN (ELEC ING TESTING IN THE FACTO TOUCH CONTACT WITH THE ORMAL TESTING.	IGLECTRICAL). THE TRANSFORMER WINDINGS BETWEEN TERMINALS 4 AND 5 INDICATED OPEN DURING MANNFACTUR Factory, Failure was caused because the Wire for Terminal 5 MAS CONNECTED TO A SOLDER BALL MAKING THE TERMINAL LUG RATHER THAN BEING CONNECTED TO THE LUG ITSELF. THE TOUCH CONTACT BRORE DURING M	BETHEEN TERNINALS 4 A MIRE POR TERNINAL 5 MECTED TO THE LUG 171	HD S INDICATED OPE MAS CONNECTED TO A ELF. THE TOUCH CON	M DURING MANUFA SOLDER BALL MAI TACT BRONE DURIT	S O Z
CORRECTIVE ACTION-THE VENDOR REPORTED TH ION ABOUT ONE YEAR BEFORE THIS FAILURE. THEN TRANSFORMER APPARENTLY WAS MADE UNIT, NO ADDITIONAL ACTION WAS REGUIRED.	CORRECTIVE ACTION-THE VENDOR REPORTED THAT ITS SUALITY CONTROL UNCOVERED SLOPPY RENORLING DURING THE MOLDING OPERATION ABOUT ONE LEAR BEFORE THIS FAILURE. THIS WAS CORRECTED AND NO RELICRED DURING OR AFTER MOLDING HAS SINCE BEEN ALLO NED. THIS TRANSFORMER APPARENTLY WAS MADE BEFORE THIS ACTION WAS TAKEN, SINCE THIS IS THE ONLY RNOWN FAILURE OF THIS UNIT, NO ADDITIONAL ACTION WAS REGUIRED.	HROL UNCOVERED SLOPF AND NO REWORK DURING 24 WAS TAKEN: BINCE 1	Y RENORKING DURING OR AFTER MOLDING HIB IS THE ONLY RN	THE MOLDTING OF HAS SINCE BEEN OF FAILURE OF	THIS THIS
AUTOFILOT-BAUARE-A/B	CT-9B-04-112-P BATTCH RT	FAR 55-41001-855	651025 36A	3 3	. January 18 - 18 - 18 - 18 - 18 - 18 - 18 - 18
FAILURE MODE-FAIL DUPIN GRANMER UNB AT ZERO TIME NHEN BWITCH SB NAS OBBER MORT CIRCUITINS.	FAILURE MODE-FAIL DUPING OPENATION. 8/N 2D4-DD8 PROGRAMMEN FAILED MEN BMITCH 27 MAS OBSENVED TO BE ON MAEN THE PROGRAMMEN AT ZERG TIME, APPLICATION OF A REPET COMMIND TUNNED BMITCH 27 OFF. PROGRAMMEN 8/N 501-DD09 WAS PLUCTED MAEN SMITCH 55 WAS OBSERVED TO HAVE NO QUIPUT. FAILURE CONFIRMED IN BOTH UNITS THE CAUSE 18 ATTRIBUTED TO EXTENNAL A MORT CIRCUITING.	PAILED WHEN SWITCH ANED SWITCH BY OFF.	et mas observed to programmer s/n soi the gause is attri	- BE ON WARN THE - COOS WAS PEJEC BUTED TO EXTERM	0 4 4
				PAGE 0188	9160

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

	174240			101101		*****		
PRI VENDOR NAME OTH VENDOR PART ND			SECONDS AND THE PITCH LEVEL INDICATOR LIGHT FROM PORSIBLE POOR SOLDER COMMECTION IN EIT		VEHICLE 247D WHILE UNDER TEST AT DOC JINE CUTOFF AND THE ZERO-TIME INDICAT HORT CIRCUITED. THE CAPACITOR FAILUR ANUFACTURING. 0.507 INCH TO 0.498 INCH, TO REDUCE MISALLGAMENT OF THE INSULATING GASKE CONCENTRIC WITH EACH OTHER TO MITHIN	YES 60/5 HO	A DASH 445 TO RAGRAPH 5.6.0; E EKRON INTEST CORRECT RESISTS	PASE 0169
		88	WEL 1	# Q	# # # # # # # # # # # # # # # # # # #	£ 5	FRON ERANG	
TIME DIF		FACTORY	PITCH LE	FACTORY	EATD WHILE FF AND TH CUITED. 1 RING. CH TO D.4 MENT OF 1	FACTORY	FICATION 24, BOOK TO A TOL MB 199UED 8,6.8, TA	
VEHICLE DATE DIF		631029	S AND THE	2470	I VEHICLE 661NE CUTO SHORT CIR MANUFACTU 1 0.507 IN 1 0.507 IN	1260	FTER HOD! ARE 27-284 (17818-UTED (17818-UT	
DIF DATA SOURCE PART NUMBER	endefiniere dach, gezeige nich zemreten gereiche der der der der der der der der der de	FAR 53-41001-655	OPPED AT 100.161 SECOND IICATION RESULTED FROM P	FAR R7-44536-3	ROGRAMER REPORTEDLY FAILED ON IE RECEIVED FROM THE VERNIER ENG. B) WAS FOUND TO BE BURIED AND 3 THE INSULATING GASKET DURING M. THE INSULATING GASKET DURING M. THE OF THE CASE DUE TO SLIGHT THE DIANCTERS MUST BE TRUE AND	FAR 35-41001-855	AS 7.6 KILCHUS, PROCEDIAS CONTRIBED, AND WAS AND WAS WEED, BATED COTOBER IN UNK ED, EASE & BOOK E, FURE ET-EASE &	
TEST/REPORT HUMBER FAILED COMPONENT HANG	and experience of the contract	C1-94-04-107-F 60/C	FAILURE MOSE-FAILED DURING OPERATION, THE PROGRAMMER STOPPED AT 100-161 SÉCONDS AND THE PITCH LEVEL INDICATOR LIGHT CANE CAN CANE ON. THERE WAS NO FAILURE IN PROGRAMER. FAILURE INDICATION RESULTED FROM POSSIBLE FOOR SOLDER CONNECTION IN EIT ER THE A-RE OR A-RS CHASSIS IN THE TEST SET.	NZ-AB-D4-4507-F CIRCUIT BOARD CAPACITOR	RICAL), THE AUTOPILOT P. NO OUTPUT SIGUALS WES CTURED BY ITT PZW PA406 SLIGHT MISALIGHMENT OF BLOCK THE DIAMETE IRCUITING THE TAMFALUM LUM DISC AND THE ANDDE	. CT-89-C4-103-P	FAILURE MODE-OUT OF TOLERANCE, PROGRAMMER REPORTEDLY FAILED IN CHECKOUT AREA AFTER MODIFICATION FROM A DASH 64% TO DASH 64% WAS RESISTANCE HEASURENT FROM PIN 13-D TO 11-F WAS 7.6 KILCHMS, PROCEDURE 27-26424; BOOK E; PARGRAPH 5.6-B; TABLE IV, SPECIFIES 6 TO 1E KILCHMS, REPORTED FAILURE WAS CONFINED, AND MAS ATTRIBUTED TO A TOLERANCE ENROR INTEST PROCEDURE. CORRECTIVE ACTION-EMSINEERING CHANGE NOTICE 31183D; CHANGE D; DATED OCTOBER 11; 1963; WAS ISSUED TO CORRECT RESISTS OF TOLERANCE FROM 6-12 KILCHMS TO 7-12 KILCHMS IN PROCEDURE 27-28424; BOOK E; PARAGRAPH 8.6.8; TABLE 4.	
ATENA BUB-STATEN	CORRECTIVE ACTION-NOME.	AUTOPILOT-SQUARE-A/B	FAILURE MODE-FAILED DURING OPERATION, THE PROCESSED ON, THERE WAS NO FAILURE IN PROGRAMER. IN THE TEST SET.	AUTOPILOT-SQUARE-A/B	FAILURE MODE-SMORT (ELEC R. 13 FACTORY CHECKOUT ARE CR. CAPACITOR C-11 (WAMM) E WAS PROBABLY CAUSED BY CORECTIVE ACTION-THE W THE POSSIBILITY OF SWORT T. ALSO, BETWEEN THE TARE	D.003 INCH TOTAL READING AUTOFILOT-SOURE-A/B PROGRAWER	FAILURE MODE-OUT OF TOLI DASH 855. RESISTANCE MEAI TABLE IV. SPECIFIES & TO PROCEDURE. CORRECTIVE ACTION-ENGIN WE TOLERANCE FROM 8-12 KI	

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

RVATEM	TEST/REPORT HUNGER DIF	DIF DATA SOURCE		3116	BITE PRI VENDOR MANG	
MULTINATION TO A SECTION	FAILED COMPONENT NAME	FART NOVOER	1367	ETR	YES	\$1000
PROGRAMMEN	CIRCUIT BOARD-DICOR	27-41001-617	<u>,</u>	304	ş	
FAILURE MODE-OUT OF BPE OCCURRED AS SMITCH RE IS 15 HO PROCEDURE CALLOUT . INCORDECT INSTALLATION	FAILURE MODE-OUT OF SPECIFICATION, IMPROPER OPERATION OF PROGRAMMER BUITCH EE AT 504 SECONDS. THIS SHOULD MOT OCCURRED AS SWITCH EE IS NOT USED IN THIS PPOCRAM, AN INCORRECT DIODE MARKI HASTALLATION WAS THE CAUSE, SINCE IS NO PROCEDURE CALLOUT FOR A COMPLETE CHECK OF EVERY SMITCH FUNCTION, THIS PROBLEM WAS NOT OBSERVED IN PRIOR . INCORDECT INSTALLATION COULD NOT BE EXPLAINED.	ROGRAINIER BNITCH RE RECT DIODE HATRIK IN CH FUNCTION: THIS PR	AT 504 BECO STALLATION CBLEN MAS N	MDB. THI MAS THE IOT CBSER	S SHOULD NOT HAVE CAUSE, SINCE THERE VED IN PRIOR TESTS	
CORRECTIVE ACTION-NO CO	CORRECTIVE ACTION-NO CORRECTIVE ACTION TAKEN. EXISTÍNG PROCEDURES AND/OR TEST EQUIPMENT NOT NOTIFIED TO INCLUDE COM Plete smitch checkout due to himan mature of problem and lack of Budget.	CEDURES AND/OR TEST CK OF BUDGET.	EQUIPHENT H	DT NOTIF	IES TO INCLUDE COM	
AUTOFILOF-BBUARE-A/B PROGRAPHER	CT-99-04-103-F	FAR 55-41001-855	900169	FACTORY 225	7E8 70	*****
FAILURE MODE-FAIL DURIN RMITTENTLY AT 225 SECOND CONTACT ON THE SMITCH E OR: THE OUTFUT AT BOME T	FAILURE MODE-FAIL DURING OPERATION, AUTOPILOT PROGRAMMER REPONTEDLY FAILED UMEN THE AUTOMATIC TEST SET STOPPED INTERNITY AT RES SECONDS MITH SEVERAL PROGRAMMER BUITCH TIMING FAILURES INDICATED. FAILURE WAS CAUSED BY A STICKING CONTACT ON THE SMITCH ER RELAY, THE MELAY CONTACTS MERE MOST PROBABLY DANAGED BY AN EXCESSIVE LOAD OR SHORT CIRCUIT OR THE OUTPUT AT SOME TIME DURING THE BELATS LIFE.	EPONTEDLY FAILED WHE HING FALLMES INDICA BT PRCBABLY DAMAGED	N THE AUTON TED. FAILUR BY AN EXCES	ATIC TES E MB CA BINE LOA	USED BY A BITCHING O ON SHORT CIRCUIT	
CORRECTIVE ACTION-WOME.						
AUTOFILOT-BEUARE-A/B PROGRAHEER	LV-00-04-440E-F CINCUIT BOARD-MIRING	FAR 27-41480-1	\$00150	FACTORY	4. O	******
FAILURE MODE-OUT OF SPE . UNIT WAS DEPOTTED AND IN AN EXTERNAL REVERSED NTO POTTING MOLD	FAILURE MODE-OUT OF SPECIFICATION, BINARY ASSENBLY (S/M 9279) FAILED STANDAND MANUFACTURING POST-FINCAPSULATION TEST , unit was depotted and it was observed that lead wires s and 7 mere crossed over inside the Potted Case, resulting In an external reversed position of the TWO Mires. Cross-over most likely occurred when binary assenbly was placed i	78) FAILED BYANDATO ND 7 WERE CROSSES OV ER MOST LIKELY OCCUR	HAMUFACTURI ER INSIDE T RED MHEN BI	HE POSTE	FACAPBULATION 1EST D CASE, RESULTING EMBLY WAS PLACED I	
CORRECTIVE ACTION-DIODE AS ING POTTING HOW ELIMINATED.	DIODE ASSEMBLY WAS MADE PRIOR TO CHANGE TO SHORTER LEAD WIRES. THEREFORE, CROSS-OVER OF LEADS DUR Minated.	TO BHORTER LEAD WIRE	a. THEREPOR	E, CROBS	-OVER OF LEADS DUR	
AUTOPILOT-SQUARE-A/B PROGRAHMER	LV-99-04-4482-F CIRCUIT BOARD-WIRING	FAR E7-41400-1	431008	FACTORY	7E3	
FAILURE HODE-ELECTRICAL IT WAS DEPOTED AND AN I LUME WAS DUE TO WINING D INTO POTTING HOLD.	FAILURE HODE-ELECTRICAL SHORT, BINARY ASSEMBLY (S/N B4DE) FAILED STANDARD NANUFACTURING POST-ENCAPSULATION TEST. UN It has depotted and an internal skunt between lead wine a and the cathode lead of diode ch-1 was discovered. The fai Lune has due to wining discrepancy inside the Potted Case, short host likely occurred when binary assembly was place D into Potting wold.	FAILED STANDARD MANN ND THE CATHODE LEAD SHORT MOST LIKELY OC	FACTURING P OF DIODE CH CURRED WHEN	087-EHCA 1-1 148 D 1 BIHARY	PSULATION TEST, UN ISCOVERED, THE FAI ASSEMBLY WAS PLACE	

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	VENDOR HANE	OF LEADS DURIN	UTOPILOT PROGR. MAB NOT VERIP	And the state of t		R 20 SECONDS O TCH E6 GUTPUT.	ERE COMPONENTS CIRCUIT BOARDS : PROPERTIES AN		OUNTER ASSEMBLEFECTIVE TRANS	PAGE 0171
	# O	3	758 176 A 176 A 170 E	1	5 Q	A 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 0 2	¥E3	347 F 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
	\$17E TIME DIF	ME, SHOR	FACTORY TION OF CATED FA A FAILUR	į	FACTORY	CTIVATED DE IN TH	D TO ARE. ALIGNEEN CONCERNIN	FACTORY	RAMER, UTED TO THE TRAN	
S.F.	VEHICLE DATE DIF	EB. THEREFO	#31003 CTION VIBRA D. THIS RE' BULTING IN	A Company of the Comp	1970 431003	ROCRAMER A CRACKED DIC	G BE APPLIE HTING HOLE MB 185UED C	£850 €3100£	OFILOT PROC D 18 ATREE T CAUSE OF	
DPILOT BYETEN-AIRBO	DIF DATA BOURCE PART HUMBER	TO SHORTER LEAD WIR	FAR 1 E7-414E8-801 AILED DURING PRODI OF THE TIME STANDAR ON THE TEST SET RE	THE LOGIC NETWORK.	FAR 27-41622-807	IN THE AUTOPILOT PAS ATTRIBUTED TO A THE BODY OF THE DI	UM COMFORMAL COATIN E MADE TO CHECK MOU TTERN, 3MMS 18.09 M	FAR E7-40964-603	TESTING OF THE AUT HE WAS CONTINHED AN EN EMAST). THE EXAC	
DIFFICUATIES REVIEW-AUTOFILOT SYSTEM-AIRBORING	TENTARPORT NUMBER FAILED COMPONENT NAME	CORRECTIVE ACTION-DIODE ASSEMBLY MAS MADE PRIOR TO CHANGE TO SHORTER LEAD WIRES. THEREFORE, SHORTING OF LEADS DURIN PO'ING PROCESS WOM ELINIMATED.	FAR 631003 FACTORY YES CIRCUIT BOARD/LOGIC 1 AND E NETWOR E7-41428-801 ROGRAMMER R FAILURE HODE-ERRATIC OPERATION, THE LOGIC 1 AND E NETWORK FAILED DURING PRODICTION VIBRATION OF THE AUTOPILOT PROGRAMMER CAUSING THE PROGRAMMER TO JUMP 80 MILLISECONDS AHEAD OF THE TIME STANDARD. THIS REPURTED FAILURE HAS NOT WESTED. IT IS PROGRAMMED TO JUMP BO MILLISECONDS AHEAD OF THE TEST SET RESULTING IN A FAILURE INDICATION OF THE LOGIC HETWORK.	CORRECTIVE ACTION-NOME. THERE WAS NO DETECTABLE PAILURE IN THE LOGIC NETWORK.	LV-99-D4-4544-F CIRCUIT BOARD-DICDE	FAILURE MODE-STRUCTURAL. SMITCH 28 OF THE LOGIC & ASSEMBLY IN THE AUTOPILOT PROGRAMMER ACTIVATED AFTER 20 SECONDS O F AUTOMATIC TESTIMS INSTEAD OF 201.1 SECONDS. THE PAILURE MAS ATTRIBUTED TO A CRACKED DIODE IN THE SMITCH 26 GUTPUT. THE BREARAGE MAS DUE TO EXCESSIVE COMFORMAL COATING AROUND THE DODY OF THE DIODE.	CORRECTIVE ACTION-1.NP3 25.45 MAS ANENDED TO REQUIRE MINIMUM CONFORMAL COMTING BE APPLIED TO AREAS WHERE COMPONENTS MAIL: REPLACED, TO ELIMIMATE EXCESSIVE COATING.2. TOOLS WERE MADE TO CHECK MOUNTING MOLE ALIGNMENT OF CIRCUIT BOARDS AND MODULE TRAMES AND TO ELIMIMATE VARIANCE OF THE MOLE PATTERN. SMMS 18.09 MAS ISSUED CONCERNING THE PROPERTIES AN BULLITY OF THE EPOTY CONFORMAL COATING.	LV-99-D4-432DF CIRCUIT BOARD TRANSISTOR	FAILURE MODE-FAILED DURING OFERATION, DURING MANUFACTURING TESTING OF THE AUTOPILOT PROGRAMMER, THE LOUNTER ASSEMBLY FAILURE FOR THE TOWN THE STAND ST	
***	BYSTEN SUG-SYSTEM	CORRECTIVE ACTION-DIODE	ANTOFILOT-SQUARE-A/B PROGRAMMER FAILURE HODE-ERRATIC OF AMMER CAUSING THE FACGRA IED. 11 IN PROGRABLE INCO LOGIC METHORK.	CORRECTIVE ACTION-NOME.	autofilot-salare-a/B Programmer	FAILURE MODE-STRUCTURAL F AUTOMATIC TESTIMG INST THE BREARAGE MAS DUE TO	CORRECTIVE ACTION—1.MP3 MEL: REPLACED, TO ELIMI AND MODULE FRANES AND F D BUALITY OF THE EPONY C	AUTOPILOT-SQUARE-A/B	FAILURE MODE-FAILED DUR Y FAILED TO MANUALLY RES 181088 9-4 IN THE T-B AN UMKHOMM.	CONRECTIVE ACTION-NOME.

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DIFFICUATIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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#737Ex #08-87#7EX	YEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE 91F	\$17E TIME 01F	¥ 5	SITE PHI VENDOR NAME TIME DIP OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	A-18-04-4431-F	FAR 87-72578-3	630823	FACTORY	vts 60/0	2/ CB	*****
FAILURE MODE-PRENATURE OF START, THIS SHOULD OCC THE FAILURE MODE COALD BEENHINED HICHORGOPICLY B	FAILURE MODE-FREMATUNE OPERATION, PROGRAMPER REPORTEDLY SWITCHED FROM 1.8 TO E.D VOLTS AT 15 SECOMDS AFTER FREATED TR START, THIS SHOULD OCCUR AT PLUS 50.0 SECUMDS. THE REPORTED FAILURE COULD NOT BE VERIFIED AFTER PEREATED THE FAILURE WODE COALD BE DUPLICATED BY MOMENTARILY IMPORTING CR-6 IN THE BMITCH FLIR-FLOP CIRCUITRY. DIODE EXAMINED HICHOSCOPICLY BUT DID NOT REVEAL ANY DISCREMANCY	ITCHED FROM 1.8 TO E TED FAILUME COULD NO WE CR-8 IN THE BMITC	O VOLTA A	T 15 BECC TED AFTER	4	AFTER PROCRAMM EATED TESTIME. DIODE CA-6 MAS	
CCRRECTIVE ACTION-NO COR	CORRECTIVE ACTION CAN BE TAKEN AS THE EXACT CAUSE OF FAILURE INDICATION IS NOT RHOMM. (ORFOGITE-PRO/DPL 43F 6 YES SELYON SELYON	EXACT CAUSE OF FAIL COSTOS ITE-PRD/DPL	ASF 45F	1104 18 1	5 H 5	OM.	
FAILURE HODE-FAIL DURING	TIME OPERATION, VERMIERS STARED TO SO DEGREES AT (SIMULATED) SCALITION PLUS 241 RECORDS. CAUSED	XEREES AT IBIMA.ATE	3 IGNITIC	3 2 2	ä	COMDS. CAUSED	
SYSTEM EFFECT-IMPROPER PTHIS THE	T A FAILED SMITH * IN THE AVERTHENDING." SYSTEM EFFECT-IMPROPER AMALOG SIGNALS PRESENTED TO THE WERNIER MALLING COMPARATOR WHICH ARE SCANNING "OR A MALL AT HIS TIME.	HER HALLING CONTARA	101 Ha	ARE SCAN	*	THE A HULL AT	
WEHICLE EFFECT-MONE.							
AUTOFILOT-SQUARE-A/B N-20-04-4427-	A-20-04-4427-F	FAR 27-43901-801	45F	WIR	YES 60/C	5/05	89£7££
FAILURE HODE-OUT OF TOLE E. NO DISCREPANCY WAS FOL	FOLERANCE, PROGRAMMER IR/D WHEN VERNIER ZNGINES WERE FOUND BIASED GUT TO SO DEGREES AT ZERO TIN FOUND BY FAILURE AMALYSIS. THE REPORTED FAILURE MAY MANE BEEN CAUSED BY A SMALL TRANSIENT, CAUR, R. SOUNCE OF THIS TRANSIENT COULD NOT BE FOUND.	T. MGINES WERE POUND TO FAILURE MAY HAVE SE FOUNDS	BIASCO CLUSE	7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	E CAE	ES AT ZERO TIM TRANSIENT, CAU	
AUTOFILOT-BEUARE-A/B	8F-99-D4-4430-P	FAR 87-41498-1	\$30 9£1	FACTORY	7E8 60/C	10 / C	
FAILURE HODE- FAIL DURIN B BINARY ASSEMBLY WAS REN REHOVAL OF THIS ASSEMBLY	FAILUNE HODE- FAIL DURING OPERATION. IT WAS REPORTED THAT THE BIMARY ASSEMBLY WAS SHORTED OUT DURING VIBRATION. THI BIMARY ASSEMBLY WAS REMOVED FROM ITS WEXT ASSEMBLY AND FAILURE ANALIZED, NO FAILURE COULD BE FOUND. IT IS POSSIBLE REMOVAL OF THIS ASSEMBLY FROM ITS MEXT ASSEMBLY ALSO REMOVED THE PAILURE SAMPLE.	FME BINARY ASSEMBLY ' ILUME ANALIZED, NO P. ID THE PAILUME BAMPLI	AS SHORTE VILURE COU	D OUT DU	\$.	VIERATION. THE IT IS POSSIBLE	
CORRECTIVE ACTION-17 MAS	MAS PERUESTED FACTORY SHIP THE WOLE DISCREPANT UNIT FOR FAILURE ANALYSIS RATHER THAN OMLY THE	DISCREPANT UNIT FOR	TAILURE AN	ALTBIB R	2	THAN COLT THE	
	esi, depositati di massimi di secesa di se mandini deser segmente de secesa di secesa de segmente de secesa di	general formations of the second of the seco			-	PAGE DITE	_

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		DIFFICULTIES REVIEW-A	DIFFICUATIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	¥				,
	M3.244 M3.64-978	TEST/REPORT HUSER FAILED COMPONENT HAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE PRI	\$17E 71ME DIP	07H	VENDOR HARE	 ,
	SUSPECT SUBASSENBLY CO.	T COMPONENT, THIS WILL PREVENT INDISCRIMINATE LOSS OF FAILURE SAMPLES.	THIMTE LOSS OF FAILUR	E BANPLES				1002727
	AUTOFILOT-SQUARE-A/B	3-99-04-4440-F HI-POMER BWITCH-RELAY	FAR 66-73807-67	630920	FACTORY	20	UNION BW. AND BIG.	
	FAILURE MODE-FAIL TO CPERATE, THE EPORTED FAILURE MAS NOT CONFIRMED. ENT TERMAMAL 17. THE BEHT TERMINAL EMBLY CIRCUIT BOARD, ALSO REF. FAR	FAILURE MODE-FAIL TO OPERATE, THE RELAY USED ON THE HIGH PMR ASSEMBLY REPORTEDLY STUCK AND FAILED TO OPERATE. THE R EPORTED FAILURE MAS NOT CONFIRMED, HOMEYER UNUSED TERMINALS 15:14; AND 17 WERE SHONTED TOGETHER DUE TO AN INTERNAL B ENT TERMANAL 17. THE BEHT TERMINAL 17 MAS MOST LIRELY CAUSED BY DROPPING RELAY MHEM IT MAS REMOVED FROM ITS HEXT ASS EMBLY CIRCUIT BOARD, ALSO REF. FAR A-99-DA-4439-F FOR SIMILAR FAILURES.	PAR ABSEMBLY REPORTED LB 15.16; AND 17 WERE BED BY DROPPING RELAY ILAR PAILURED.	LY BTUCK A SHORTED TO WHEN IT WA	MO FAILE RETHER D S REMONE	0 3 0 0 5 5	OPERATE. THE R AN INTERMAL B H ITB MENT ABB	
	CORRECTIVE ACTION-MOME.	CORRECTIVE ACTION-HOME. FAILURE COULD NOT BE CONFIRMED.						
	AUTOPILOT - SQUARE-A/B	A-A9-04-4409-F	FAR 27-43501-805	58-F 630919	x 5	YES 60/C	3/99	261500
	FAILURE MODE-OUT OF TOL UNCTIONS JUST BEFORE THE DATURELY.) FAILURE COUL	FAILURE MODE-OUT 'Y TOLERANCE, PROGRAMMER WAS IR/D FOR LOW NO 60 OM MAPCHE CARD 424. CARD 424 MEASURES PROGRAMMER F Umctions sust defore the Roll Guidance Emble Function occurs. (Measures That Roll Guidance Emable, Dots Kut occur Pr Dhaturely.) Failure could not be confirmed.	DA NO GO CH MAPCHE CAR CURB. (HEABURES THAT R	D 424. CAR OLL GUIDAN	D 424 NE.	L BOC	B PROGRAMES F	
	CORRECTIVE ACTION-FAILU	CORRECTIVE AUTOM-FAILURE COALD NOT BE CONFIRMED. NO CORRECTIVE ACTION TAKEN.	RECTIVE ACTION TAKEN.					
	AUTOFILOT - SQUARE - A/B PROGRAMER	A-AB-O4-6418-F 8417CH-8CR	FAR 27-43901-801	110F 630919	FACTORY	9 9		***************************************
	FAILURE MODE-SHURT-ELEC URRENT LIHITER IN SW. 18 TO THE MIBBILE MARKES.	FAILURE HODE-SHGRT-ELECTRICAL, PROGRAMMEN WAS IR/D WHEN NO CUIPUT PROM SM. 18 MAS CRSERVED. TESTS SMOKED THAT THE C URRENT LIMITER IN SM. 18 MAS BURNED CPEN. THIS WAS CAUSED BY A SMORT IN A TEST CABLE CONNECTING TEST ACCESSORY SOSS TO THE MISSILE MARKESS. SHORT WAS CAUSED BY AN INCORRECT ASSEDBLY OF CONNECTOR BE-SDOSS-SOS.	40 CUTPUT FROM SM. 18 BY A SHORT IN A TEST ASSEDBLY OF COMMECTOR	MIS OBSERV CABLE CCAN BE-SOGSE-S	ECTING 11	2 T A	MAS CRSERVED. TESTS SHOWED THAT THE C CABLE CCHRECTING TEST ACCESSORY 5068 02-30030-503.	
	CORRECTIVE ACTION-ALL T	CORRECTIVE ACTION-ALL TEST HARNESSES USING THE 9E-3039-303 CORRECTOR WERE INSPECTED AND FOUND TO SE ANYGNBLED CURR	IO3 COMMECTOR MERE IMB	PLCTED AND	FOUND TO	3	AND CORR	
	AUTOPILOT-BEUARE-A/B PROGRAMMER	AA63-0037/PE-4CO-01-R63	COMPOSITE-S FACT	8630 8308:8	CTR	₹ ₹		
	PAILURE HOSE-FAIL TO OP A R. SULT. THE ROLL PROG	'O OPERATE AT PRESCRIBED TIME, UMBILICAL PGOS MAS NOT MANUALLY EJECTED UNTIL PLUS 6.8 SEL: MDS. AS- Program ims started at 6.8 seconds.	IL PEGS MAS NOT MANUAL	LY KJECTED	r is	* * *	. B BELLUDB. AS	
	CYSTEM EFFECT-OFERATION STARTS TOO LATE.	STARTS TOO LATE.						
	WENTERE EFFECT-NONE.							
							PARE 0173	
. '	CANADA CA		CHARLEST CONTRACTOR OF THE PROPERTY OF THE PRO	THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, WHEN				_

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DIFFICULTIES REVIEW-AUTOFILCT SYSTET-AFRBORNE

8V&1E#	TEST/REPORT NUMBER	GIF DATA BOURCE	VEHICLE DATE DIF	VEHICLE BITE	# 5	VENDOR HANE VENDOR PART NO	
					1		****
CORRECTIVE ACTION-NOME.		Management of the control of the con					-1
AUTOFILOT-SQUARE-A/B PROGRAMMER	AA63-0637/PE-460-01-E65	COMPOSITE-S FACT	2650 630916	Ē	76 80		• • • • • • • • • • • • • • • • • • • •
FAILU E MODE-FAIL DURING	FAILUIE MODE-FAIL DURING OPERATION. THE AUTOFILOT FAILED TO ISSUE THE VELOCITY PACKAGE BEPARATION BACK UP SIGNAL.	N TO INNE THE WELCEIT	Y PACKAGE	BEPARATI	ON BACK	UP SIGNAL.	
STATEM CFFECT-IMPROPER GISCRETE BILKALB.	JIBCRETE BIUMALB.						
WEATCLE EFFECT-COMMAND NOT RECEIVED.	NOT RECEIVED.						
CORRECTIVE ACTION-PROGRAMMER REPLACED	HAMER PEPLACED.					-	+
AUTOFILOT - SALMRE - A /B PROGRAMMER	LV-53-D4-4540-F SMITCH 22	FAR 27-41001-421	263D 630913	E.	5 č		984188
FAILURE MODE-SHORT IELEC UT OF SMITCH RE, THE BEPA NOMERATIVE,	ICLECTRICAL), DURING PROGRAMMER TROM DEPARATION SCRUENCE BACKUP PUNCTION	PROGRAMMER TROUBLE SHOOTING A CURRENT LIMITER WAS BURNED OPEN WHEN THE OUTP BACKUT FINCTION, WAS INADVERTENTLY SHORTED TO GROUND. THIS MADE SMITCH RE I	DATES N	AS BURNEZ RCUMD. TI	D OPEN 1	MEN THE OUTP	
CCBRECTIVE ACTION-ETH PG	CCRRECTIVE ACTION-ETH PERSONNEL HERE CAUTIONED TO USE EXTREME CARE WHEN TROUBLING SHOOTING AUTOPILOT PROGRAMMER WHI E POMER IS ON.	KIRENE CARE WHEN TROUB	L1166 \$4001	ING AUTO	11.01	TOGRANDER WIT	
AUTOFILOT-SQUARE-A/B PROGRAMMER	LV-63-04-4543-f SWITCH-ARH/SAFE	FAR 27-41001-621	2430 630913	ETR	¥ 6		993830
FAILURE MODE-FAILED DURI EST. THIS INDICATED A POS MAY HAVE BEEN DUE TO A L	DURING CFERATION. THE SAFELIGHT EXTINGUISHED FOR NO APPARENT REASON DURING A GUIDANCE COMMAND T A POSSIDLE PROBLEM WITH THE ARM-BAPE SATICH. THIS FAILURE COULD NOT BE REPEATED OR CONFIRMED AND O A LOOSE TEST SET COMMECTION OR TO A LOOSE LIGHT SULB.	INGUISHED FOR NO APPAR SWITCH, THIS FAILURE A LOOSE LIGHT BULB.	ENT REASON COULD NOT	DUALNE REPER	A GUIDAI	KCE COMMAND T CONFIRMED AND	
CORRECTIVE ACTION-NOME.	pupalanan pamah da I Barangan pamahan da mahan pamahan pamahan pamahan melangi melangian pamahan per						
AUTOFILOT-BOURRE-A/B PROGRAMMER	A-99-04-4453-F	FAR 88-73800-087	630613	FACTORY	ž 3	UNION BY AND B	
FAILURE MOCE-FAIL TO UPE Y SENT FOR ANALYSIS NATHE	PAILUNE MODE-FAIL TO UPERATE, THREE RELAYE REPORTEDLY FAILED WHILE INSTALLED IN THEIR MENT ASSEMBLIES. NEXT ASSEMBL Y SENT FOR AMALYSIS MATHER THAN THE INDIVIDUAL RELAYS.	ALLED WATLE INSTALLED	N THEIR	5x1 +445	4 CIE.	MEXT ASSEMBL	13
		e die de de la companyation de des la companyation de des la companyation de la companyation de la companyation		A ferral or contraction		PASE 0174	

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STSTEM SUB-STSTEM	TESTUREPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF T	TINE DIF	PRI VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-FAIL	COMAECTIVE ACTION-FAILURE COULD NOT BE CONFIRMED. NO FURTHER CORRECTIVE ACTION TAKEN.	NTHEN CONNECTIVE ACTIO	M TAKEM.			*****
AUTOFILOT-SEUARE-A/B	A-AB-GA-44G7-F POAER BUPPLY CAPACITOR	FAR 27-43901	113F F.	FACTORY YE	7 63 10	***
FAILURE MODE-OUT "F TO B MORNAL USING GROUND PE E MISSILE INVERTER MAYE PFICIENT MAGNITUDE TO TI LEES OUT OF THE CLOCK.	FAILURE MODE-OUT "F TOLERANCE, PROGRAMMER TRYD FOR RUMLING AT TWICE MORMAL SPEED WITH HISSILE PAR. THE OPERATION S MORMAL USING GROUND "AH, FAILURE AMLYSTS REVEALED A FAULTY CAPACITOR C-8 IN THE ATAI PLUS 40 YDC POMER SUPPLY. E HISSILE INVENTER MAYESHAPE RIPPLE COMBINED WITH NO FILTERING OF THE PLUS 40 YDC RESULTED IN A RIPPLE VOLTAGE OF PYLCIENT MAGNITUDE TO TRIP THE SIMARIES IN THE CLOCK PULSE GENERATOR. THIS CONDITION RESULTED IN DOUBLE FRESUENCY LEES OUT OF THE CLOCK.	ING AT TWICE MORNAL SPEED WITH MISSILE PAR. THE OPERATION AULTY CAPACITOR C-6 IN THE ATAL PLUS 40 YDC POWER SUPPLY. TERING OF THE PLUS 40 YDC RESULTED IN A RIPPLE VOLTAGE OF SE GENERATOR. THIS CONDITION RESULTED IN DOUBLE FREGUENCY.	EED WITH HIS: THE ATAI PLI VDC RESULTED DITION RESUL	11 PMR. 18 40 VOC 1N A RIP	THE OPERATION WA POWER SUPPLY. TH VIE VOLTAGE OF SU BLE FREGUENCY PU	
CORRECTIVE ACTION-40/C	CORRECTIVE ACTION-6D/C MODIFIED PUR. SUMPLY TEST SET (EID E7-3604) TO INCREASE HEASUREMENT ACCURACIES OF WOLTAGE) RIPPLE.	ID 27-3004) TO INCREAS	E HEASUREHEN	r ACCURACI	ES OF VOLTAGE AN	
AUTOFILOT - SQUARE-A/B	A-A9-D4-A379-F CIRCUIT BOARD	FAR 27-43901-801	109F F.	FACTORY YES	TE\$ 40/C	******
FAILURE MODE-OPEN (ELECT), DURING CONTRHED DUE TO OPEN CURRENT LIMIER PROBABLE INADVERTENT GROUNDING CORRECTIVE ACTION-60/C CHECKED MIS		SYSTEM CHECKOUT SMITCH 18 HAD NO OUTPUT AT TIME TO FIRE RETROROCKETS. FAILURE WAS TER ON HIGH POWER & BOARD 27-41635-5. FAILURE CAUSED BY EXCESSIVE CURRENT FLOW UN OF SMITCH 18 OUTPUT.	TIME TO FIRE RE CAUSED BY BHORT CIRCUI	EXCESSIVE	ETS. FAILURE MAS: CURRENT FLOW UN	
EXCESSIVE CURRENT TO FLO	ON THROUGH THE CURRENT LIMITER. N. ABRGA-ASOA-F	S SHORT CIRCUITS WERE	136F 6	IX ATS	7E\$ 60/C	•
PRUKRAHER FAILURE MODE-FAIL TO GI GYRO LABORATORY MEN M ESTIMG, THE TEST ENUIPM	RE-AIGGI-GIT STUBOR NO. THE THE STATE STUBOR NO. FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME, THE AUTOPILOT PROGRAMMER WAS REJECTED AT ETR DURING TEBTING IN THE GYRO LABORATORY WAS NOT COMPIRMED AFTER EXTENSIVE TO STATEMENT BUCCESSFULLY TESTED SUBSEQUENT PROGRAMMERS, THEREFORE, IT IS HIGHLEY UMLIKELY THAT THE PA	ET-41001-617 TOPILOT PROGRAMER WAS ID. THE REPORTED FAILU T PROGRAMMERS, THEREFO	SUBDO REJECTED AT RE MAS NOT CO	NO ETR DURING NATIRHED AF	W TESTING IN THE FIER EXTENSIVE T RELT THAT THE FA	
LLME WAS DLE TO A 1EBT E CORRECTIVE ACTION-NOME.	ILURE MAS DUC TO A IEST EQUIPMENT MALFUNCTION. CORECTIVE ACTION-NOME, THE FAILURE WAS NOT CONFIRMED.					
ALTOPILOT-SQUARE-AZB	AX43-0003-109F/FC-CO-01-0012-155	15 COMPOSITE-FACTORY	109F	22		·
ASLUNE WOOE-FASE DURSS	FAILURE MODE-FAIL DURING OPERATION, CHANNEL NO. 1 OF HIDWEST NO. 2 MONITORING OUS DEFLECTION AT APPROXIMATELY ES SECONDS DUE TO FALLIY TEST PROGRAMMEN TAPES	DEST NO. 2 MONITORING TEST PROGRAMMEN TAPES	PROGRAMER (TART INDI	PROGRAMMER START INDICATED AN EXTRANE (ABE),	

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		A-VALVE BRUIL AND BRUILD	DIFFICULTIES REVIEW-AUTOFILOT STREET RE-ALABORNE	¥		1		•
٠	SYSTEM SUB-SYSTEM	TEST/AEPONT NUMBER FAILED COMPONENT NANZ	DIF DATA SOURCE PART HUMBER	VEHICLE BITE PRI	817E 11ME 01F	# 0 # 1 # 1	VENDOR NAME VENDOR PART NO	
<u></u>	STRICH EFFECT-IMPROFER	BYBYEN EFFECT-IMPROPER DIBGRETE BISHALB, ADDITIONAL PROGRAMMER BTART BIGNAL TRANBMITTED DURING TEBT.	RANNER START SIGNAL TR	ANSHI TTED	DURING TO	. 101		
	VEHICLE EFFECT-COMPOSIT	VEHICLE EFFECT-COMPOSITE RESCHEDULED. A PARTIAL COMPOSITE RETEST MAS PERFORMED.	E RETEST WAS PERFORMED	•				
	CORRECTIVE ACTION-THE T	HE TEST PROGRAMMER TAPES MERE REPLICED.	٥,					
	AUTOFILOT-BBUARE-A/B PROGRAHMER	##- 48-04-4098-F	FAR 39-41001-#31	1350	FACTORY	S m	J/03	7.07.0
	FAILURE MODE-FAIL TO OF ER CUTOFF AT 205 SECOMOS B PHSTALLED IN MISSILE 8	O OPERATE AT PRESCRIBED TIME, DURING HIBBILE CHECKOUT, THE PROGRAMMER FAILED TO INITIATE BUBTAIM ONDS. FAILURE NOT CONTIRMED IN PROGRAMMER, THE FAILURE WAS CAUSED BY INCORRECT ELECTRICAL HARMED LE BEE FAR AP-AS-D4-4359-F, BHTE FOR PRIMARY CAUSE.	HIBBILE CHECKOUT, THE WAS FRINKE WAS PRIMARY CAUSE.	PROGRAMMER CAUSED BY	PATLED	O IN	ITIATE BUBTAIN ITRICAL HARNES	**************************************
	CCRRECTIVE ACTION-NOME.	. REQUIRED ON PROGRAMMER.						
, ~ =	AUTOFILOT-SALARE-A/B PROGRAMER	SP-96-04-4408-F FLIP-FLOP SHITCH TRANSISTOR	FAR 55-41001-849	1260 630623	ETR	<u>9</u> 9		• • • • • • • • • • • • • • • • • • • •
	FAILURE MODE-ELECTRICAL VDC. FAILURE AMALYSIS FO Y THE PASSAGE OF EXCESS! IMG THE TEST SET AT ETR.	FAILUGE MODE-ELECTRICAL SHORT, PROGRAMMER SNE CUIPUT MAS -13VDC, THE SM. CUIPUT SHOULD MAYE BEEN -8 PLUS OR MINUS S VDC. FAILURE AMALYSIS FOUND A SHORT CIRCUITED TRANSISTOR 6-13 (EMITTER TO COLLECTOR) THE TRANSISTOR MAS DESTROYED B Y THE PASSAGE OF EXCESSIVE CURRENT. THIS CURRENT MAS PROBABLY THE RESULT OF GROUDING THE SMITCH DURING TROUBLESHOOT ING THE TEST SET AT ETR.	-13VDC, THE SM, OUTPL Q-11 (EMITTER TO COLL ABLY THE RESULT OF GRO	T SHOULD H ECTOR) THE CHOING THE	AVE BEEN TRANSIST	- 2 3 - 2 3 - 2 3	LUS OR MINUS S AS DESTROYED B TROUBLESHOOT	
	CORRECTIVE ACTION-PERSONNEL DELICATE ELECTRONIC CIRCUITS.	ERSONNEL AT ETR NERE CAUTIONED TO EXERCINE EXTREME CARE WHEN TROUBLE BHOOTING TO AVOID DANAGING Circuits.	RCINE EXTREME CARE WHE	N TROUBLE	SHOOT ING	4 0	OIO DAMAGING	
,	AUTOPILOT - SQUARE - A/B PROGRAMMER	AX83-0003-137F/FC-CO-03-0011-033 HARNE 88	S COMPOSITE-FACTORY	137F 630413		9 9		*86407
	FAILURE MODE-PAIL TO OP D TO START, THE PAILURE R.	O OPERATE AT PRESCRIBED TIME, DURING THE FIRST POST COMPOSITE RETEST THE PLIGHT PROGRAMMER FALLE. URE WAS ATTRIBUTED TO INTERMITTENT OPERATION OF START RELAY (K705) AND/OR THE AGE TEST PROGRAMME.	THE FIRST POST COMPOSI ERATION OF START RELAY	TE RETEST (KTOS) AN	THE PLIS D/OR THE	Ey	JERAMER PAILE TEST PROGRAME	
	BYBTEM EFFECT-OFCRATION DOES NOT START.	DOES NOT START.						
	WENICLE EFFECT-COMPOBIT	OBITE RESCHEDULED. A COMPOSITE PIN TEST WAS REGUIRED.	ST WAS REGUIRED.	,				·
	CORRECTIVE ACTION-RELAY	IELAY (K703) MAS REPLACED AND THE TEST PROGRAMMER TAPES WERE CLEANED.	PROGRAMMER TAPES MERE	CLEANED.				
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10 1/20 1000	DIFFICULTIES REVIEW-AUTOFILOT STRTEM-AIRBORNE	FILOT SYSTEM-AIRBOM	¥		
SYBYER BAR-averes	TESTARPORT HUMBER PATLED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	PRI VENDOR HANE	
AUTOFILOT-BRUNK-A/B	8P-88-04-4401-F SMITCH 17-DIODE	FAR 87-41001-83	1970 ETR 630613	9 9	-
FAILUME MODE-FAIL DURIN TE SET ABBOMBLY MAS BURN	FAILURE MODE-FAIL DURING OFTRATION, PROGRAMMER WAS IRZD FOR NO OUTFUT FROM SW 17. DIODE CR-6 IN THE PROGRAMMER REMO E SET ASSEMBLY MAS BURNED OFEM, THIS MAS DUE TO A SMORT CIRCUIT IN THE AGE.	NO CUIPUT PROM BM CUIT IN THE AGE.	17. DIODE CR-6 IN	THE PROGRAMMER REMO	
CORNECTIW: ACTION- SHORY	HORY CIRCUIT WAS REPAIRED.				
AUTOFILOT-SAUARE-A/B PROGRAHMER	SP-89-D4-4393-F CIRCUIT BOARD TRANSISTOR	FAR 27-41449-3	SSGGT FACTORY	YES 60/C	** 30**
FAILGHE M.DE-FAIL DURIM T AND SUBASSCHELY TEST. BOTH TRANSISTORS HAD HE TS TO GROUND DURING TEST	FAILGHE M.DE-FAIL DURING OPERATION. COUNTER & CIRCUIT BOARD HAD SEVERAL INTERHITTENT BIMARY OUTPUTS DURING DROP TES T AND SUBASSCHELY TEST, FAILURE WAS CONFIRMED DUE TO DISCREPANT TRANSISTORS 8-4 AND 8-5 (BOTH EM975) OF BIMARI T-T. BOTH TRANSISTORS HAD HILH ENITTER-TO-COLLECTOR LEAKAGE MOST PROBABLY CAUSED BY HUMAN ERROR OF SHORTING BIMARY OUVPU TS TO GROUND DURING TESTING.	HAD SEVERAL INTERNANT TRANSISTORS G-4 PROBABLY CAUSED B1	ILTTENT BINARY OUT AND 4-5 (BOTH EN HUMAN ERROR OF B	HUTS DURING DROP TES 1978) OF BINNRI T-7. KORTING BINARY OUYPU	
CORRECTIVE ACTION-6D/C	CORRECTIVE ACTION-GD/C REINSTRUCTED SUBASSEPBLY TESTING AND INSPECTION PERSOYNEL IN TEST AND TROUBLESHOOTING PROCED THES. PROCEDURES MERE CHECKED AND FOUND ABEGINTE.	INSPECTION PERSON	EL IN TEST AND TR	ABLESHOOTING PROCED	
ALTOPILOT-SQUARE-A/B	3P-9D-04-4360-F CANI 8TOR-COMMECTOR	FAR E7-41001-979	630724 VTR	YES BENDIX NO 20-41PX/101	692347
FAILURE MODE-LEAR, ENTE R 4PPEARED TO BE THROUGH GUND FROM THE COMMECTOR	FAILURE MODE-LEAR, EXTERMAL, DURING CASE PRESSURIZATION TEST, PRESSURE DROPPED FROM 12 TO 7 PS.G IN 60 MINUTES, LEA R 4PPEARED TO BE THRONGH RECEPTACLE USJS (P/N 81-35900-718), FAILURE MAS CONFIRMED DUE TO SEPARATION OF SEALANT COMP OUND FROM THE CONNECTOR HOUSING, CAUSE OF FAILURE MAS MOUT PROBABLY IMPROPER CLEANING BEFORE APPLICATION OF CEMENT.	1, PRESSURE DROPPEE FAILURE MAS CONFI ROBABLY INFROPER CL	PROM 12 TO 7 PSU HED DUE TO SEPARA EANING BEFORE APP	FIN 60 HINUTES, LEA FION OF SEALANT COMP FICATION OF CENENT.	
CORRECTIVE ACTION-6D/C	CORRECTIVE ACTION-6D/C REINSTRUCTED ABSEMBLY PERBONNEL IN PROPER SEALANT APPLICATION TECHNIQUES.	ROPER SEALANT APPLI	CATION TECHNIQUES	ter general kalapin menjana serialariah - jarapan penjantan menjandara	
autofilot-saure-a/b Programer	58-98-04-4394-F	FAR 55-41001-439	1260 ETR 630717	22	• \$30.70
FAILURE MOE-ERRATIC OF OT COMFINNED IN EXTENSIV	FAILUME MOE-ERRATIC OPERATION, PROGRAMMER BMITCM 4 HAD INTERHITTENT ACTUATION TIME OUT OF TOLIRANCE, FAILURE WAS OT COMFINMED IN EXTEMBINE FAILURE AMALYBIB TEBTING. THE FAILURE WAS CAUBED BY /EBT EBUIPMENT WIRING.	ERMITTENT ACTUATION	ed the out of tole est equipment wir	IANCE. PAILURE MAS M IMG.	
CORRECTIVE ACTION-PROGR T TRANSIENTS FROM AFFECT	CORRECTIVE ACTION-PROGRAMMER FAILURE MAS NOT CONFIRMED. GO/C T TRANSIENTS FROM AFFECTING THE PROGRAMMER LOW FOMER BMITCHES.	C REVISED SITE TEST 8.	BET CIRCUITRY AN	GD/C REVISED SITE TEST SET CIRCUITRY AND ELIMINATED TEST SE TCHES,	
				PAGE 0177	
The second secon	and the second second comments and the second secon		anna actual de la company		1

GENERAL DYNAMICS CONVAIR DIVISION

18 104 1866	DIFFICUATIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	PILOT SYSTEM-AIRBOR	¥	. And the second	
SYSTEM SCB-SYSTEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICL C BITE DATE DIF TIME DI	SITE PRI VENDOR MANE TIME DIF OTH VENDOR PART NO	
AUTOPILOT -: QUARE-A/B PF-OGRAPHER	60/61-0531/13-401-00-201	rien	2010 2-3 830712 0	7£8 80	*****
FAILURE MODE-FAIL TO OPE H UMBILICAL, RATHER THAN HOTION AMITCH.	FAILURE MODE-FAIL TO CPERATE AT PRESCRIBED TIME, PROGRAMMEN START WAS APPARENTLY INITIATED BY EJECTICM OF THE B-IM H Umbilical, rather than by activation of Either of the TMO 2-INCH VEHICLE MOTION SMITCHES OR BY THE B-IMC) VEHICLE HOTION SMITCH.	E-INCH VEHICLE MOTI	LY INITIATED BY CON BWITCHER OR B	WAS APPARENTLY INITIATED BY EJECTICM OF THE 8-INC VEHICLE MOTION SMITCHES OR BY THE 8-INC! VEHICLE	
SYSTEM EFFECT-OPERATION IOM SMITCH ACTIVATION.	STSTEM EFFECT-OPERATION STARTS LATE, PROGRAMMER RUN TIME ACTIVATED AT D.260 SECONDS, D.040 SECONDS AFTER & IMCH MOT On switch activation.	TIVATED AT D.240 SE	COMDS: 0.040 SEC	MOS AFTER & SHCH HOT	
WENICLE EFFECT-MONE.					
CORRECTIVE ACTION-HOME.					
AUTOPILOT-SQUARE-A/B	A-90-04-4402-F	FAR R7-45901-5	3F WTR 650710	NO 60/C	••3157
FAILURE MODE-OUT OF TOLERANCE, PROGRAMMER IR/ OT COMFIRMED, FAULT FINALLY TRACED TO MAPCHE C	D BECAUSE OF	1 NO GO ON CARD 323	Of 1.0, 213043F	A NO GO ON CARD 325 OF T.O. 215H25F- 8-2-2. FAILURE MAS N	·
AUTOFILOT-SQUARE-A/B	SP-99-04-4399-F CIRCUIT BOARD-DIODE	FAR 27-41435-3	E12D FACTORY 630710	7 YES SYLVAUIA NO	880788
FAILURE MODE-CONTANIMATION. TPUT. FAILURE MAS CONTRINED ODE ENVELONE CAUSED FAILURE O FAILTY MAMIFACTURING.	FAILURE HODE-CONTAMINATION, DURING PRODUCTION VIBRATION, PITCH & ASSEMBLY ACTUATED PREMATURELY AND HAD INCORRECT OU PUT, FAILURE MAS CONFIRMED DUE TO A DEFECTIVE DIODE CR-3 (IMST) ON BILARY P-6 (R7-4488-11, LOOSE SOLDER INSIDE DI DE ENVELOPE CAUSED FAILURE BY INTERNITIENTLY SHORTING DIODE IN VIBRATION ENVIRONMENT, DIODE FAILURE 1S ATTI-IBUTED I	ICH E ASSEMBLY ACTURNASY) ON BRANTY P-6: IN VIBRATION ENVIR	ATED PREMATURELY (E7-41498-1) - L. ONNENT, DIODE FA	AND HAD INCORRECT OU DOSE SCLDER INSIDE DI ILURE IS ATTIIBUTED T	
CORRECTIVE ACTION-60/C P	CORRECTIVE ACTION-60/C PURGED FACTORY STOCK OF ALL INAST DIODES NANUFACTURED BY THIS VENDOR-	ODES NAMERACTURED S	Y THIS VENDOR.	enan entre e	
AUTOFILOT-SQUARE-A/B PROGRAMMER	A-90-04-4989-7	7AR 27-45901-8	SF WTM	YE& 60/C HO	988330
FAILURE MODE-FAIL TO OPE IN FOUR OUT OF BIK TRIAL	L TO OPERATE AT PRESCRIBED TIME, DURING MIS IN TRIALS, FAILURE OF PROGRAMMER WAS NOT CO	DURING HIBBILE BYBIEM TEST, ONE PITCH PROGRAM CUIPUT MAB NOT CONFIRMED AND CAUSE OF PAILURE WAS NOT FOUND.	ME PITCH PROGRAM F PAILURE WAS NO	OME PITCH PROGRAM GUTPUT STEP MAS ZERO OF PAILURE MAS NOT FOUND.	
CORRECTIVE ACTION-60/C I	CORRECTIVE ACTION-60/C INFOMED SITE PERSONNEL OF RESULTS OF ANALYSIS. MALFUNCTION OF ASSOCIATED MISSILE AID YEST E SUIPHENT WERE INVESTIGATED BUT NO DISCREPANCIES WERE FOUND.	F AMALYSIS. MALFUMC	TION OF ASSOCIAT	CO MISSILE AID VEST E	

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TINE DIF OTH VENDOR PART NO	3
YE& 60/C	****
FAILURE MODE-ERRATIC OPERATION. DURING LOOP STSTEM CHECKOUT SWITCH 16 HAD ERRATIC OPERATION. FAILURE CONFIRMED DUG To incorrect 27-41813-5 circuit Board installed unile specification called for 27-41813-5 Board. Failure caused BY P Lambing Ericor.	3 =
CORRECTIVE ACTION-CONFIGURATION PLANNING REVISED TO REFLECT THE CORRECT 27-41813-3 CIRCUIT BOARD AND ASSENGLY RENOM KED TO CORRECT CIRCUIT BOARD, GD/C FACTORY AND INSPECTION PERSONNEL INSTRUCTED TO ADHERE MORE CLOSELY TO MANUFACTURI MG SPECIFICATIONS, SURVEY OF UNITS NOT CONSIDERED NECESSARY.	. Emilian
7E8 70	3
TOLERANCE. THE MOLL PROGRAM VOLTAGE INPUT WAS INSUFFICIENT FOR DETERMINING THE ROLL PROGRAM STA RATE.	¥.
	·—· - <u></u>
FACTORY NO NO	44.14
FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. DURING MISSILE FINAL CHECKOUT BOOSTLA CUTOFF OCCURRED D.224 SECOND 8 LATER THAN NOMINAL. FAILURE INDICATION ON PROGRAMMER IS ATTRIBUTED TO DEFECTIVE FREQUENCY METER IN MAIN-MISSILE PO MER FANEL OF GROUND TEST ERUIPMENT.	9 2
FAILURE OF PROGRAMMER NOT CONFIRMED, GD/C REPLACED MAIN MISSILE (DOCK 8) POMER PANEL. CHECKOUT AN ME DEFECTIVE METER WERE REVIEWED AND POUND ADEQUATE.	# * * * * * * * * * * * * * * * * * * *
YES 60/C NO	
FAILUME MODE-ERRATIC OPERATION, DURING LOOP TEST, SCR BMITCH 13 OPERATED INTERMITTENTLY BUT ADDITIONAL TESTS DID MO : Replect intermitten' condition. Failume not confirmed after Extensive Testing, High Internal Impedance of Scr Embs : 18 most prografic cause of reported intermittent compition.	9 •
1994d	1.70
SALURE MODE-ERANTIC OPERATION. During LOGE STRIPH CHECKOLT BATTCH 18 HAD ERRATIC OPERATION. FAILURE MODE-ERANTIC OPERATION. During LOGGE CONTINUED WHILE PRECEDITATION CALLED FOR \$77-41813-3 CIRCUIT BOARD AND CORRECT VETALISTS. GCT. 18 18-3 CIRCUIT BOARD AND TO COGNECT LEAGURE. CONTINUED TO COGNECT LINGUIT SOUND. GOVER AND INSECTION PERSONNEL HAS INSTRUCTED TO ADDRESS WORE CLOSE. DO TO COGNECT LINGUIT SOUND. COGNECT LINGUIT SOUND. COGNECT LINGUIT CONTINUED TO COGNECT LINGUIT CONTINUED TO COGNECT LINGUIT CONTINUED TO COGNECT LINGUIT COGNECT LINGU	E CONTINED DUE LURE CAUSED ST P D ASSEMBLY RENOR TY TO MANUFACTURI S S NOLL PROGRAM STA ROLL PROGRAM STA ROLL PROGRAM STA NAIN-MISSILE PO MAIN-MISSILE PO MAIN-MISSILE PO MAIN-MISSILE PO AME OF SCR EMBS [PASE 0178]

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

			And the second s	Γ
BYBTEN BUB-BYBTEN	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA SOUNCE	VEHICLE SITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO	
CORRECTIVE ACTION-60/C R	CORRECTIVE ACTION-60/C REVISED SOR RECEIVING INSPECTION TESTS TO REGUIRE SPECIAL TIS. THIS PROCEDURE SHOULD MEED-OUT ANY SORS WITH MARGINAL BUITCHING CHARACTERISTICS.	TA TO REQUIRE SPECI.	CORRECTIVE ACTION-60/C REVISED SCR RECEIVING INSPECTION TESTS TO REQUIRE SPECIAL TESTS FOR SMITCHIMG CHARACTERISTIC. THIS PROCEDURE SHOULD MEED-OUT ANY SCRS WITH MARGINAL SWITCHIMG CHARACTERISTICS.	*0524*
AUTOPILOT-SQUARE-A/B	AX83-0003-2105/FC-CO-02-0013-011 AMPLIFIER, COMMECTOR	COMPOSITE-FACTORY	210D N3 630913 N3	***************************************
FAILURE MODE-OUT OF TOLERANCE. 80 CYCLE ALSO, THE PITCH PROGRAM WOLTAGES MERE D.S GRAM ISOLATION AMPLIFIER PLUS IN THE AGE.	RANCE. 80 CYCLE NOISE OCCURRED ON C OLTAGES MERE D.S VOLTS HIGHER THAN PLUS IN THE AGE.	HANNEL 18 OF HIDMES EXPECTED. THIS COMD	FAILURE WOE-OUT OF TOLERANCE. 80 CYCLE NOISE OCCURRED ON CHANNEL IS OF MIDNESTERN RECCRDER NO. 2 (FITCH PROGRAM). ALSO, THE PITCH PROGRAM VOLTAGES WERE D.S VOLTS MIGHER THAN EXPECTED. THIS CONDITION WAS CAUSED BY A LOOSE PITCH PRO GRAM ISOLATION AMPLIFIER PLUS IN THE AGE.	
SYSTEM EFFECT-INFROMER ANALOG SIGNALS.	MALOG BIGNALS.			
YEMICLE EFFECT-COMPOSITE	YEMICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTING REQUIRED.	eulato.		
CORRECTIVE ACTION-TIGHTE	INTENED ELECTRICAL CONNECTOR AT PITCH PROGRAM ISOLATION ANNUIFIER	ROGRAH ISOLATION AM	HIFIER (AGE).	
AUTOFILOT - SQUARE-A/B	A-99-04-4308-F CIRCUIT BOARD/TRANSIBTOR	FAR 27-41584-805	ESDARD PACTORY YES SEMERAL ELECTR. NO 1C	20124
FAILURE MODE-ELECTRICAL CONTRHED DUE TO FALLTY 8 CASE.	BHORT, LOGIC 3 ABSEMBLY HAB INTERMI TRANSISTOR HAVING BROKEN CHIPS OF C	TTENT BHORTING DURIL ERAHIC (MITH METALL)	SHORT. LOGIC 3 ASSEMBLY HAD INFERHITTENT SHORTING DURING LOW-LEVEL VIBRATION TESTS. FAILURE TRANSISTOR HAVING BROKEN CHIPS OF CERAMIC (WITH METALLIC PARTICLES ON THEM) LOOSE INSIDE IT	
CORRECTIVE ACTION-VENDOR	CONTACTED AND INCREASED MONITORING OF PROT THE A FAILURE IN THIS MODE HAD OCCURRED.	OF PRODUCTION TO M CURRED.	CONTACTED AND INCREASED MONITORING OF PRODUCTION TO WATCH FOR IMPERFECT CERANIC DISCS. VEN TIME A FAILURE IN THIS MODE HAD OCCURRED.	
AUT PELLOT - SQUARE - A/B PROGRAMECR	5P-99-04-4303-F AMPLIFIER-TRANSIBTOR	FAR ET-45338-803	630403 FACTORY YES	***************************************
FAILURE MODE-OUT OF TOLE AT BENSITIVE TRANSISTORS.	RANCE, DURING FACTORY BUB ASSEMBLY	TEAT AT 180 OCCASE !	TOLERANCE, DURING FACTORY BUB ASSEMBLY TEST AT 180 DEGREE F, THE AMPLIFIER FAILED BECAUSE OF ME ORS.	THE PARTY OF THE P
CORRECTIVE ACTION-TRANSI	CORRECTIVE ACTION-TRANSISTORS REPLACED WITH LESS MEAT SENSITIVE TYPE.	TIVE TYPE.		-
AUTOFILOT - RGUARE - A/B FROGRAMMER	A-99-04-4230F BIODE	FLR E7-41415-8	SYDYRY FACTORY TES NO	
PAILURE MODE-ELECTRICAL ODE CAS MAS OPEN AND HAD	ICAL OPEN, PI BINARY CANE ON AFTER COMPLETION OF PITCH PROGRAK. PI BINARY COUL. Mad a cracked case, inability to reset was attributed to diode discrepancies.	ETION OF PITCH PROG MAR ATTRIBUTED TO D	ICAL OPEN, PI BINARY CANE ON AFTER COMPLETION OF PITCH PROGRAK. PI BINARY COULD NOT BE RESET. DI Had a cracked case, inability to reset was attributed to diode discrepancies.	
			PAGE 0100	

CONVAIR DIVISION

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19 504 1966	DIFFICULTIES REVIEW-AUTOPILOT STRTEM-AIRBORNE	PILOT BYBTEH-AIRBOR	¥			,
STATEN BLB-STATEN	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE PRI	817E P	PRI VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-WORE.	REASON FOR BLODE FAILURE COULD NOT BE FOUND.	E FOUND.				00774
AUTOFILOT-SAUARE-A/B PROGRAMMER	A-90-04-4208-F PROGRAMER	FAR 27-43901-3	65E WTR	22	0.0	307461
FAILURE MODE-FAILID 70 CHERATE AT PRESCRIBED TI O FAILURE AMALTRIS WAS PERFORMED CAURE UNENDAM.	73 OPERATE AT PRESCRIBED TIME, MAPCHE GAVE NO-GO OM CARD 097 FOR VERNIER EMGINE STAGING BIAS. 18 PERFORMED CAURE LHENDAM.	AVE NO-GO ON CARD O	97 COR VERNI	ER ENGIN	E STAGING BLAS. N	
CORRECTIVE ACTION-FAILUR	CORRECTIVE ACTION-FAILURE COULD NOT BE VERIFIED. NO CORRECTIVE ACTION INITIATED.	IVE ACTION INITIATE	Ġ.	,		
AUTOFILOT - SELARE - A/B PROGRAVEER	\$\$~ \$D~04~4198~P	FAR 87-78978-1	1900 MIR 630325)/g Q	
FAILURE MODE-EXRAIIC OPE RECORDIMAS TAKEN AT THE S RAMMER. THEKE WAS EVITENCE	FAILURE MODE-EXRATIC OPERATION. A SERIES OF NO-GOS WERE RECORDED FOR THE PITCH PROCRAM COMPOSITE SIGNAL. LAND LINE RECORDIMS TAKEN AT THE SAME THE ALSO SHOWED AN ERRATIC PITCH PROGRAM. AMALYSIS COULD FIND NO PROBLEM WITH THE PROGRAM. AMALYSIS COULD FIND NO PROBLEM WITH THE PROGRAM. THEKE WAS EVIDENCE THAT SEVERE LOADING OF THE BISMAL AT THE UMBILICAL JUNCTION BOX HAD BEEN OBSERVED.	DEDED FOR THE PITCH TH PROGRAM, ANALYSI AT THE UMBILICAL	PROGRAM COM 8 COULD FIND UNCTION BOX	POSITE S NO PROB KAD BEEN	GHAL, LAND LINE LEH WITH THE PROG GBSERVED:	
CORRECTIVE ACTION-LAKNOWA.	¥.					
AUTOFILOT - SQUARE - A/B PROGRAPHER	A-99-04-4228F	FAR 27-41435-3	630321 FA	FACTORY YES	YES 60/C	694390
FAILURE MODE-FAIL DURING	FAILURE MODE-FAIL DURING OPERATION, PL BINARY TURNED ON AT 456-10 SECONDS DURING COMPONITE.	156.10 SECONDS DURI	NG COMPOSITE			
CORRECTIVE ACTION-NOME.	FAILURE NOT CONTINED.		-			
AUTOPILOT - SQUARE - A / B PROGRAMMER	NZ-A9-04-4173-F CURRENT LIMITER	FAR 27-44536-3	2060 FA	PACTORY YES	YES 60/C	**************************************
FAILURE MODE-ELECTRICAL PEN-CIRCUITED CURRENT LIN UG MAS DISCOMMETED FROM	FAILURE MODE-ELECTRICAL SHORT, SMITCH 14 OF THE PROGRAMMER FAILED TO OPERATE DURING COMPOSITE TESTS BECAUSE OF AN O PEN-CIRCUITED CURRENT LIHITER, THE CURRENT LIMITER PROBABLY BLEW DUE TO POSSIBLE SHORT-TO-GROUND WHEN THE MONITOR PL UG MAS DISCOMMECTED PROH THE MIDNEST RECORDER, SMITCH 14 ACTIVATES THE DECOT POMER SUPPLY.	ALLED TO CPERATE D LEW DUE TO POSSIBL LVATES THE DECOY PO	URING COMPOS E SHORT-TO-E	TE TEST	BECAUSE OF AN O	
CORRECTIVE ACTION-THE HO	CORRECTIVE ACTION-THE MONITOR PLUG MAS COMMESTED TO THE RECORDER.	MOER.			a eta errenta aleta garagar eta aleta eta eta eta eta eta eta eta eta eta	
		teritaria interiorista de la composição de			PAGE DIBI	

GENERAL DYNAMICA CONVAIR DIVISION

***********	DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORME	TOPICOT SYSTEM-AIRBON	¥		l			r
ATATEN BUB- STATEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 71MC 01F	# 5 E	VENDOR	VENDOR HAME VENDOR PART NO	
AUTOFILOT-BAUANE-A/B PROGRAMMER	A-99-04-4[83F TIMER	****	*16089	FACTORY	÷ 2	YES HATDON NO KESEGT		****
FAILURE MODE-SMORT ELECT	ELECTRICAL. TERMINAL INO MAS SHORTED TO GROUND BECAUSE OF INCORRECTLY MOUNTED STARTING CAPACITOR MAST TYPE CANNISTER THE TIMER MAS REJECTED FROM.	GROUND BECAUSE OF 1	MCORRECTLY	MOUNTED	81AR	11146 CA	PAC1 TOR	
CORRECTIVE ACTION-NOME.	VENDOR MAS NOTIFIED OF FAILURE.							
AUTOFILOT-SQUARE-A'B	AX63-0003-135FZFC-CO-02-0011-031	COMPOSI FE-FACTORY E7-41001-611	1337	PACTORY	763	y 03		:
FAILURE MODE-FAIL BURING RAMMER START PLUS 125 SEC MEN AND SERVO AMPLIFIER M	DURING OPERATION. THE ILUS OR MINUS SO DEUREE VERNIER PITCH BIAS FUNCTION EXPECTED AT FLIGHT PROGRAMILES SCIONGS UID NOT OCCUR. CAUSE OF FAILURE NOT PINFOINTED SINCE AVAILABLE DATA SHONS BOTH PROGRAMIFIER MORE REPLACED.	PECREE VERNIER PITCH BIAS PLAKTION EXPECTED AT PLIGHT PROGRAM RE NOT PINPOINTED SINCE AVAILABLE DATA SHORS BOTH PROGRAM	BIAS PUNCT NCE AVAILA	ION EXPEC	8	# FC16	PROGRAM	
SYSTEM EFFECT-IMPROPER D	SYSTEM EFFECT-IMPROPER DISCRETE SIGNAL" ONISSION OF VERHIER BIAS.	IR BIAS.						
WEMICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED. BYSIEM AND COMPOSITE RETEST REQUIRED.	C RETEST REQUIRED.						
CORRECTIVE ACTION-PROGRAMMER MAS REMLACED.	AWER WAS REMACED.							
AUTOPILOT-SQUARE-A/B PROGRAPHER	A-A9-14-4189-F 3WITC:-FLIP/FLCP/TRAH513TOR	FAR ET-41001-411	135F 630308	FACTORY	N O			
FAILURE MODE-OUT OF TOLE REE VERMIER BIAS FUNCTION TORS 915 AND 916 MCRE FOU	FAILURE MODE-OUT OF TOLERANCE, THE PROGRAMMER WAS REJECTED WHEN EVALUATION OF COMPOSITE TEST DATA BHOMED THE SD-DEG REE VEHITER BLAS FUNCTION MEVER OCCURRED, AMALYSIS COMD HOT CONTINH THE REPORTED FAILURE, HOMEVER, SMITCH 4 TRANSIS TORS 915 AND 916 WERE FOURD DEFECTIVE DUE TO IMADEQUATE MANUFACTURING AND GUALITY CONTROL PHACTICES OF THE VENDOR. T HE REPORTED FAILURE IS ATTAIBUTED TO THE LOW BREAKDOWN VOLTAGE OF TRANSISTOR BIG.	DIMEN EVALUATION OF OT CONFIRM THE REPORT HINGARD GUALITAGE OF TRANSISTOR BE	COMPOSITE ED FALLURE TY CONTROL	TEST DATA HOMEVER PHACTICE	3 8 8	450 THE VE	SO-DEG	
CORRECTIVE ACTION-THE VE	CORRECTIVE ACTION-THE VENDOR OF THE CENTESE WAS REMOVED AS AN APPROVED SOURCE.	S AM APPROVED SOURCE.						
 AUTOFILOT-SQUARE-A/B	A-484-04-4158-F	FAR 87-43901-3	1307	SCHILLIN YES CO/C	# Q	ý g		
FAILURE WOEF-FAIL TO OPE LEANSWEEP PROGRAM. AMALYS	TO CPERATE AT PRESCRIBED TIME, THE PROGRAMMER REPORTEDLY PAILED TO OPERATE DURING THE OPERATION C AMALYSIS COULD FIND MO FAILURE OF THE PROGRAMMER.	RAIMER REPORTEDLY FAI LOGRAMMER.	LEG TO OPE	RATE DURI	£	it OPER	ATTON C	
 CORRECTIVE ACTION-NOME.								
						4	PAGE DIAR	
	THE RESERVOIS CONTRACTOR OF THE PROPERTY AND ADDRESS OF THE PROPERTY OF THE PR	AND SERVICE ASSESSMENT OF THE PROPERTY OF THE	-	-	-			

GENERAL TYNAMICS

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	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	OFILOT SYSTEM-AIRBOR	₩				,
BYBTCH BUD-BYBTCH	TEST/REPORT NUMBER FAILED COMPONENT WAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF T	917E 71ME DIF	PRI VENDOR NAME OTH VENDOR PART HO	VENDOR NAME ENDOR PART HO	
AUTOPILOT-BELARE-A/E	A-99-04-4802-F CIRCUIT BOARD TRANSIBTOR	FAR 27-41434-608	650215 F	FACTORY	YE B		*****
FAILUME MODE-FAIL DUMING T. CAUSED BY PITCH & CIRC	DURING OPERATION, PITCH PROGRAM STOPPED 1.87 SECONDS AFTER START, DURING PRODUCTION VIB 1 CIRCUIT BOARD TRANSISTOR AT WHICH HAD HIGH LEAKAGE CURRENT AND LOW BREAKDOWN VOLTAGE.	1.07 SECONDS AFTER S 116H LEAKAGE CURRENT	AFTER START, DURING PRODUCTION VIBRATION TES CURRENT AND LOW BREAKDOMN VOLTAGE.	PRODUCT	ION VIBRAT	TON TES	
CORRECTIVE ACTION-RAR IN	CORRECTIVE ACTION-RAR INITIATED TO GUALITY COMIRCE TO FIGHTEN RECEIVING INSPECTION REQUIREMENTS TO INCLUDE REVERSE. REKERDOM VOLTAGE AND THE LEARAGE CURRENT SPECIFICATIONS.	TEN RECEIVING INSPECT	TON REGULAL	EMENT& TO	INCLUDE	IE VER BE	
AUTOPILOT-SQUARE-A/B	AX63-0003-1960/FC-C0-01-0013-000	CONPOST TE-FACTORY	1980	F 2	YE& 60/C		*****
FAILURE MODE-CPEN (ELECT), CHANNEL 4 OF 6 THE TEST, THIS CONDITION MAS CAUSED BY	(ELECT). CHANNEL 4 OF MIDNESYERN RECORDER NO. 2 MONITORING BOOGTER CUTOFF, DID NOT ACTIVATE DURIN NDITION MAS CAUSED BY AN (PEN CIRCUIT A! PLUG SUSSUSPY PIN X (BOOSTER CUTOFF TEST OUTPHI).	N NO. E HONITORING BOOSTER CUTOFF, DID NOT ACTIVA PLUG SUSUSPA PIN X (BOOSTER CUTOFF TEST OUTPHI).	DOSTER CUTOR	FF, DID N	OT ACTIVAT	A DURIN	
SYSTEM EFFECT-IMPROPER DISCRETE SIGNAL	DISCRETE SIGNAL.						
WENTCLE EFFECT-COMPOSITE	WENICLE EFFECY-COMPOSITE DELAYED. POST-COMPOSITE TESTING N. BUTHED.	Saurado.					
CORRECTIVE ACTION-THE HAI	HARNESS WAS REPAIRED.						
AUTOPILOT - SQUARE - A/B PROCRAMEER	SF-99-04-4170-F CIRCUIT BOARD-9MITCH	FAR 27-41635-3	212-D F.	PACTORY YE.	YES 60/C NO		
FAILUTE MODE-PREMATURE CA 1. OF THE PROTAMER PACKA! AT MAYE BEEN CAUSED BY A (FAILUTE MODE-PREMATURE OPERATION, HIGH-POWER SMITCH 14 OPEKATED 13 SECONDS EAPLY DURING PRODUCTION VIBRATION TESTIN 14 OF THE PROGRAMMER PACKACE, AMALYSIS OF THE HIGH-POWER E C'RCUIT BOARD REVEALED NO FAILURES, THE REPORTED FAILURE M AY HAVE DEEM CAUSED BY A DEFECT IN THE TOP PACKAGE OR IN TM. TEST EQUIPMENT.	ATED 13 SECONDS EAPINGUIT BOWND REVEALET	Y DURING PE	RODUCTION ES. THE R	VIBRATION	TESTIN	
CORRECTIVE ACTION-NONE.	i						
AUTOFILOT - SQUARE-A/B	FARA-98-04-4107-F	FAR 27-41001-611	ATE BOSOS		NO 27-41001-611	119-11	*****
FAILURE MODE-OPEN (ELECTY TO A SUDDEN LOSS OF PHARM HECK SNOTCATED NO DAMSE 1	(ELECTRICAL). THE PROGRAMMERNAB REJECTED WHEN IT MAS BUBJECTED TO A R PHASE EXITATION VOLTAGE DUE Of PHASE A FOR 30 SECONDS. THERE MAS NO PROGRAMMER FAILURE BUT A CONTIDENCE CHECK WAS REQUESTED. C DANIGE TO THE PROGRAMMER.	WHEN IT WAS BUBLECTE CORRESSORY PAILURE BUT	B TO A E P	ASE EXIT	MAS REQUE	AGE DUE	
CORRECTIVE ACTION-MOME.	artin estimate de distribuir de service de s						
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CENERAL DYNANICS

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						VENDOR PART HO	
AUTOPICOT-BRUARE-A/B	A-98-04-4142-F CIRCUIT BOARD/RELAY	FAR #4-73800-047	630203	FACTORY	YES UNION SHI NO NO SIGHAL RSSHLP68	UNION SWITCH A ND SIGNAL RSSHLP68	*****
FAILURE MODE-FAIL TO OPE CIRCUIT BOKPD. THE RELAT	TO OPENATE AT PRESCRIBED TIME, THE RELAY FAILED TO EMERGIZE WHILE THSTALLED ON THE RELAY COIL MAS LOCKE AND HAD A BROKEN WIRE AT THE INSIDE LEAD-IM CONNECTOR.	FAILED TO EMERGIZE INE ANSIDE LES	WHILE THSTA	11.ED OH 1708.	THE NEXT	NEXT ASSEMBLY	<u>,</u>
CORRECTIVE ACTION-EVALUM RELIABILITY TO THE RESHLP ELEASED FOR MISSILE USE O	CORRECTIVE ACTION-EVALUATION TEST REPORT ETARESA: DATED MAY RA: 1983; REVEALS THE VSSHLPBH RELAY TO BE SUPERIOR IM ELIABILIY TO THE RESHLPGS RELAY. THE 133HLPGH WAR ARSIGNED PART MAGER 86-73910-010; DATED JUNE 13:1963; AND MAS R JEASED FOR MISSILE USE ON JUNE 30:1963.	IT E4, 1943, REVEALE ED PART NUMBER 66-736	THE V35HLP	H RELAY PED JUNE	TO BE 3W	FRIOR IN AND WAS R	
AUTOPILOT-SQUARE-A/B	5P-90-04-4113F D1CDE	FAR	1570	4	99		86459£
S'AILURE HODE-OPEN (ELECT E ANALYSIS REGUESTED TO D ALFE GUIPUT CIRCUIT OF SM	FAILURE HODE-OPEN (ELECT), AGE WIRE FOUND SHORTED TO GROUND WITH INDICATIONS IT HAD DRAWN EXCESSIVE CURRENT, FAILUR E AMALYSIS REQUESTED TO DETERMINE WHETHER AUTOPILOT PROGRAMMER HAD BEEN DAMAGED. CIRCUIT BOARD DIODE BURNED OPEN IN SAFE CUIPUT CIRCUIT OF SMITCH 17.	ND WITH INDICATIONS	IT HAD DRAW	N EXCESS:	IVE CUARE) DDE BURNEL	HT. FAILUR	
CORRECTIVE ACTION-AGE WI	AGE WIRE DISCREPANTY CORRECTED.						
ALTOFILOT-SQUARE-A/B PROGRAMMER	FAR HG-99-04-4111-F HARNESS	FAR 27-44677-1	002089	FACTORY	TES 60/E NO 87-41	60/E E7-4133E-7	*****
FAILURE MODE-OPEN ELECTR ON REVEALED FOLLOWING DIS NAMECTOR PINS. 3-CRACKS EN	FAILURE MODE-OPEN ELECTRICAL. MARNESS TRAY WAS REMOVED TO BE REPLACED WITH NEW DESIGN, SUBSEQUENT TEARDOWN INSPECTI ON REVEALED FOLLOWING DISCREPANCIES, SEVERAL E WIRE ADAPTER PINS BROKEN AT SOLDER JOINT. E-BROKEN WIRE STRANDS AT CO NMECTOR PINS. 3-CRACKS IN SOLDER JOINTS AT COMMECTOR PINS.	BE REPLACED WITH NE R PIHS BROKEN AT SOLI	DER JOINT.	UBSEQUEN	T TEARDOM	N INSPECTI ANDS AT CO	
CORRECTIVE ALTFON-ASSEMBLY PERSON NO. & WIRE ADAPTERS WILL BE USED.	CORRECTIVE ALTION-ASSEMBLY PERSONNEL MERE PROCESSED THRU MASA SOLDER SCHOOL, RESISTANCE SOLDERING METHODS ARE USED NO. R WIRE ADAPTERS WILL BE USED.	MASA BOLDER SCHOOL.	RESISTANCE	SOLDERIN	6 METHODS	ARE USED.	
AUTOFILOT-SQUARE-A/B	A-99-04-4127-F	FAR 27-41490-1	630130	FACTORY	ž č		51478
PAILURE MUDE-ELECTAICAL KT ABNEMBLY CIRCUIT BCARC CR-S, THE GIGGE SHOWED SI	PAILURE MUDE-ELECTAICAL OPEN. BIX BINAXY ASSEMBLIEB REPORTEDLY FAILED IN THE FACTORY UNILE INSTALLED ON THE SAME ME KY ABAGMBLY CIACUIT BOARD, AMALYBIB FOUND ONLY ONE BINARY ARSEMBLY DEFECTIVE AS A RESULT OF AN OPEN-CIRCUITED DIODE CA-5. THE DIODE SHOWED BIONE OF BEING OVERHEATED AND THE CATSTAL WAS BROKEM LODGE FROM ITS LEAD CONNECTION.	TEDLY FAILED IN THE AASENBLY DEFECTIVE A RYSTAL WAS BROKEN LO	FACTORY WHI A A RESULT ORE FROM 17	CE INSTA OF AN OF B LEAD C	LLED ON TI EN-CIRCUI ONNECTION	HE 3AME ME TEO DI ODE	
CORRECTIVE ACTION-NOWE.	CORRECTIVE ACTION-NOWE, CAUSE OF DIODE FAILURE COULD NOT BE FOUND.	BE FOUND.					
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DIFFICULTIES REVIEW-AUTOFILOT STRIEM-ATREORME

	0 0 2 2 4			***	**************************************		
VENDOR NAME	TES NO TO FIRE WHEN THE TOP IN THE SAFE PLUS 28V	ES THE TENDENCY OF TES 60/C NO.	OR IN MATING C	60/C ESTING DID NOT		ILED. NO FUNCTI	PAGE 0189
9 0 1 1 1	3 3 H	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		33 Ř	9	Q X	
VEHICLE BITE PRI	38 BERVED TO BELAY IN CKING.	FACTORY ALLED IN P	ARD COMES	ETR T. EXTENS	FACTORY	OUND PONE!	
VEHICLE DATE DIF	1160 830123 13 MERE OB 968 ROTARY 96 AND 871	4301£2	CIRCUIT BO	630117	1300	#30110 #30110 #C # Of 6R	
DIF DATA SOURCE PART NUMBER	FAR 1160 38 55-41001-826 630123 OF HIGH POWER SWITCHES WERE CORERVED TO A DEFECTIVE RSSHLP68 ROTARY BELAY WITH RESULTANT BINDING AND STICKING.	FAR E7-41814-803 DURING SHOCK TEST N	TO BE POORLY MATING (FAR 635117 ETR NO 6D/C 93-41001-8E9 NO TEST PROGRAMMER RESET 4 SECONDS FARLY. EXTENSIVE YESTING DID NOT	TAN	CE OCCURRED WEN PHASE DE CRACKED CASES. CE DEPARTMENT THAT GE	
TEST/REPORT NUMBER FAILED COMPONENT NAME	FAR 1160 36 TES WOGANWER WOTARY RELAY \$5-41001-829 \$30123 NO FAILURE MODE-STRUCTURAL. UNIT WAS REJECTED WHEN A NUMBER OF HIGH POWER SHITCHES WERE COSERVED TO FIRE WHEN THE TOP OF THE PROGRAMMER CASE WAS TAPPED. FAILURE WAS ATTRIBUTED TO A DEFECTIVE R35HLP68 ROTARY BELAY IN THE SAFE PLUS 28V CIRCUIT. THE RELAY ARMATURE SHAFT WAS COCKED IN 178 FIVOT WITH RESULTANT BINDING AND STICKING.	COCKING. COCKIN	FAILURE NOT COMFIRMED. MOST PROBABLE CAUSE MAS CONCLUDED TO BE POORLY MATIME CIRCUIT BOARD COMMECTOR. Corrective action-factory personmed informed of Failure amalysis results in order to reduce human error in matime rout board commectors.	FIGURE HORE-PREMATURE OPERATION DURING FUNCTIONS. TEST PROCA.	CORRECTIVE ACTION-NOW, REQUIRED FOR PROGRAMMER.	TRANSFORMER TRANSFORMER TRANSFORMER S30110 NO TRANSFORMER TRANSFORMER TO SEE 1F DAMAGE OCCURRED WHEN PHASE B OF GROUND FOWER FAILED. NO FUNCTI FOUND HOMEVER TRANSFORMERS TE AND TS HAD CRACKED CASES. FAILURE AMALYSIS GROUP WARNED HAINTENANCE DEFARTHENT THAT GROUND POWER UNIT HUST BE PROFERLY MAIN	
1191EX 241-2197EX	AUTOFICOT-SQUARE-A/B PROGRAMMER FAILURE MODE-BIRUCTURAL OF THE PROGRAMMER CASE I	CORRECTIVE ACTION-A REL COCKING. AUTOPILOT-SCURE-A/B PROGRAHMER FAILURU HODE-FAIL DURIT	FAILURE NOT CONFIRMED. CORRECTIVE ACTION-FACTO	AUTOFILOT-SQUARE-A/D PROKRAMER FAILURE MODE-PHEMATURE COMTIRM FAILURE, MALFU	CORRECTIVE ACTION-NOW:	AUTORILOT-BAUARE-A/B PROCHAMMER FAILURE MODE-STRUCTURAL CALL FAILURES MERE FOURE CORRECTIVE ACTION-FAILL TAIMED.	

SENERAL DYNAMICS CONVAIR DIVISION

11 JUN 1000

DIFFICULTIES REVIEW-AUTOFILC? SYSTEM-AIRBORNE

#31674	TEST/REPORT NUMBER	DIF DATA SOURCE	VEHICLE	31.16	PRI VENDOR NAME	9	
MALAN - PAR	FAILE CHECKEN NOTE	raki mompen				T	1
AUTOFILOT - BRUNKE - A / B PROGRAMER	A-A9-04-40R4F 3Mi TCH/010DE	FAR 87-41001-605	*0106	FACTORY	7£8 €0/C	•	****
FAILURE MODE-FAILED TO C. CRS ON THE US ALAAR BOATED TO INADVENTANT SHORT	FAILURE MODE-FAILED TO OPERATE AT PRESCRIBED TINE- PROGRAMMER SWITCH IT HAD NO OUTPUT ON SAFE SIDE DURING COMPOSITE. . CRS ON THE US ALSAE BOARD WAS OPEN CIRCUITED, APPARENTLY FROM EXCESSIVE CURRENT, CRS MAS INSSO. FAILURE IS ATTRIBUTED TO INADVENTANT SHORT CIRCUIT DURING TROUBLE SHOOTING OF SYSTEM.	JER SWITCH 17 MAD W ROM EKCEBSIVE CURRE BYBTEM.	O OUTPUT ON	3AFE BIO 8 1N540.	ON SAFE AIDE DURIM. COMPOSITE WAS INS40. FAILURE IS ATTRIBU	2 G	
CORRECTIVE ACTION-FACTOR	CORRECTIVE ACTION-FACTORY PERSONNEL CAUTIONED TO USE EXTREME CARE DURING TROUBLE SHOOTING.	E CARE DURING TROUR	ILE SHOOTIN	ن			
AUTOPILOT - SQUARE-A/B	AX65-0003-134F/FC-CO-01-0011-030	COMPOSI TE-FACTORY ET-41001-603	134F 630108	FACTORY	7E8 NO	8	894468
FAILURE HODE-FAIL TO CPE	FAILURE HODE-FAIL TO CPERATE AT PRESCRIBED TIME, CHANNELS EGRENTRY VEHICLE BEPARATE), EST WERNIER CUTUFF) AND 20 T Prearm backup) of midwesterm recorder no. 2 did not activate.	GREENTRY VEHICLE AL	(PARATE) , E	S VERNIE	R CUTOFF) AND	•	
SYSTEM EFFECT-: PROPER DISCRETE SIGNALS.	DISCRUTE SIGNALS.					-	
WEHICLE EFFECT-CUMOSITE	WENICLE EFFECT-CLAPOSITE RESCHEDULED. SYSTEM AND COMPOSITE RETEST REQUIRED.	RETEST REQUIRED.					
CORPECTIVE ACTION-SUBSECTIVE ACTION-SUBSECTIVE ACTION PART V	CORPECTIVE ACTION-SUBSEQUENT TO AUTOPILOT REPLACEMENT AGE CABLE 27-72623-3 CABLE WAS REPAIRED. DATA AVAILABLE DOES NOT INJICATE WHICH PART WAS THE PRIMARY CAUSE OF FAILURE.	ABLE 27-72625-5 CAR	NE WAS REP	ATRED. DA	TA AVAILABLE DO	s,	
AUTOFILOT - SQUARE - A/B PROGRAMMER	AK61-0003-134F/FC-C0-01-0011-030	COMPOSITE-FACTORY E7-41061-605	134F 430108	FACTORY	YES 60/C NO	•	264769
FAILURE MOE-FAIL TO OPE	OPERATE AT PRESCRIBED TIME. CHANNELS E (RE-ENTRY VEHICLE SEPARATE), ES (VERMIER CUTOFF) AND RB Midnestern recorder no. e did not activaté. Exact causé unknomm.	. (NE-ENTRY VEHICLE MATE. EXACT CAUSE IN	SEPARATE),	ES CVERN	IER CUTOFF) AN	:	
SYSTEM EFFECT-INPROPER C	SYSIEM EFFECT-IMPROPER DISCRITE SIGNALS- DISCRETES LACKING.						
WEHICLE EFFECT-COMPOSITE	WEHICLE EFFECT-COMPOSITE RESCHEDULED. SYSTEM AND COMPOSITE RETEST REQUIRED.	RETEST REQUIRED.				man manakatan	
CORRECTIVE ACTION-THE AL	AUTOPILOT PROGRAMER MAS REPLACED.		description of Artificial Section 2			-	
AUTOPILOT - SQUARE - A/B	A-A9-じA-じならいない。 TRAとおこの10A	FAR R7-41000-831	101F 62D708	FACTORY	07 09 09 09 09 09 09 09 09 09 09 09 09 09	<u>:</u>	00 00
FAILURE MODE-ELECTRICAL AND 45 WERE SHORTED COLL AZ. 94MAGE WAS ATRIBUTED	FAILURE MODE-ELECTRICAL BHONT-BOOSTER TWO MENT MARD OVER IN TAM MHEN HYDRAULIC PRESSURE WAS AFPLIED. TRANSISTONS 93 AND 85 WERE SHORTED COLLECTOR TO ENITTER, DIODES CR4 AND CR5 WERE OPEN, RESISTOR RII WAS BURNED ON CIRCUIT BOARD AM. AZ. DAMAGE WAS ATTRIBUTED TO EXTRAMAL SHORT CIRCUIT APPLIED DURING TROUBLE SHOOTING.	F YAW WHEN HYDRAULIGES WESTS DURING TROUBLE SHOO	PRESSURE TOR RILLMAN	MAS APPLI BURNED O	ED. TRANSISTOR	6 4	
CORRECTIVE ACTION-MOME.							
de de la company de la comp	nederanismis of regimental productions are a considerated. For all the second special special states of real Principles.						
A PROPERTY OF THE PROPERTY OF	erangay p	an begre grinden strike strike sekalik sekalik sekalik sekalik sekalik sekalik sekalik pekalik			Sein Both		

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DIFFICULTIES REVIEW-AUTOFILOT STREEM-AIRBORNE

13 204 1964

	STATEM SAD-STATEM	TEAT/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE PRI DATE DIF TIME DIF OTH	317E 71ME DIF		VENDOR NAME	
	AUTOPILOT-SAUARE-A/B PROGRAMER	A-99-04-3368F 0100E 1H354	FAR 87-41001-970	1180	FACTORY	n ð		4.0044
	FAILURE MODE-ELECTRICAL AME (410 OH43) MAS DUE) , THIS FAILURE PRODABLY F AMOUNT OF CURRENT TO BE	FAILURE MODE-ELECTRICAL SHORT. THE PROGRAMMER EXHIBITED A LOW RESISTENCE BETWEEN PINS JE-9 AND J3-K. THE LOW RESIST AME (420 CHAS) LAS DUE TO A SHORTED CRB DIODE (1M338) ON CIRCUIT BOARD USAZAR. IN ADDITION CRS MAS FOUND TO BE OPEN . THIS FAILURE PROBABLY RESULTED FROM THE USE OF AN EXTERNALLY GROUNDED PIECE OF TEST EQUIPMENT CAUSING AN EXCESSIVE AMOUNT OF CURRENT TO BE DRAWN INTO THE CIRCUIT.	A LOW RESISTENCE BETH CIRCUIT BOARD USAZAR MALLY GROUNDED PIECE	EEN PINS JE IN ADOITI OF TEST EQU	CON CRS M	3-K. 48 FOC AUSTING	13-K. THE LOW RESIST WAS FOUND TO BE OFEN CAUSING AN EXCESSIVE	J-10
	CORRECTIVE ACTION-PERSONNEL INVOLVED IN TEST D TEST CAUIPMENT WHEN TESTING THESE PACKAGES.	CORRECTIVE ACTION-PERSONNEL INVOLVED IN TESTING AUTOPILOT PROGRAMMERS WERE CAUTIONED ABOUT USING EXTERMALLY GROUNDE) TEST EQUIPMENT WHEN TESTING THESE PACKAGES.	T PROGRAMMERS WERE CA	UTIONED ABO	V USING	EXTE	HALLY GROUNDS	
	AUTOPILOT-SQUAPE-A/B	NE-49-04-3375F CURRENT LIMITER	, FAR 27-44536-5	1820	FACTOR	₹ ₹	er en	\$60035
	FAILURE MODE-ELECTRICA M.V). THE DISCREBALCY V SMITCH 14). THE BURNED- CHRECTED TO THE PROGRAM	FAILURE MONE-ELECTRICAL OPEN, DURING FACTORY CHECKOUT NO OUTPUT WAS RECEIVED FROM SWITCH 14 (ACTIVE DECOY POMER SUP MLY). THE DISCREPAKT WAS DUE TO A BURNED-OPEN CURRENT L'MITER OM R-4 OF THE HAZZE CIRCUIT BOARD P/N ET-41635-861 (SHITCH 14). THE BURNED-OFEN CURRENT LIMITER MAS CAUSED BY A FAULTY PIECE OF TEST EQUIPMENT IA DECOY SIMULATOR BOAN C OMMECTED TO THE PROGRAHMEN OUTPUT (REF-FAR ME-A8-04-3376).	NO GUTPUT MAS RECEIVED FROM SWITCH 14 (ACTIVE DECOY POMER SUL'HITER OM R-G OF THE HYATAR CIRCUIT BOARD PYN ET-41635-601 BY A FAULTY PIECE OF TEST EQUIPMENT IA DECOY SIMULATOR BOAP	FROM SWITCH SATAR CIRCL SI EQUIPMEN	1 14 (ACT 11 BOARD 17 (A DEC	1 VE DE	COY POWER SUP 27-41635-651 (MLATOR BOXE C	
	CORRECTIVE ACTION-TWD RETURNED TO SERVICE.	CONKECTIVE ACTION-TWO DECOY SIMULATORS WERE FOUND TO BE NOT-TO-BLUEPRINT. THESE WERE REBUILT TO SPECIFICATIONS AND ELICHMEND TO SERVICE.	NOT-TO-BLUEPRINT. THE	SE WERE REE	101LT TO	aPEC11	TICATIONS AND	
	AUTOPILOT - SQUARE - A/B PROGRAMMER	AX62-D072/FC-CO-01-0013-005	CO4POSITE-FACTORY R7-44534-3	1820	FACTORY	5 g	60 /C	00200
	FAILURE MODE-FAIL TO C	TO OPERATE AT PRESCRIBED TIME-THE DECOY POWER ACTIVATE FUNCTION DID NOT OCCUR AT STAGING PLUS O.S.	F POMER ACTIVATE PUNC	TION DIG M	T OCCUR	A7 87.	161MG PLUS 0.1	
	SYSTEM EFFECT-IMPROPER DISCRETE SIGNAL.	POISCRETE SIGNAL.						
	VEHICLE EFFECT-COMPOSI	WEHICLE EFFECT-COMPOSITE RESCHEDULED. SYSTEM AND COMPOSITE LEVEL RETESTING WAS REQUIRED.	TE LEVEL RETESTING MA	S REGUIRED.				
1	CORRECTIVE ACTION-THE	CORRECTIVE ACTION-THE PROGRAMMER WAS REPLACED.						
	AUTOFILOT-SEUARE-A/B PROGRAPHER	MZ-AS-04-3384F RECTIFIER /2M683/:BCR	74R 87-44536-3	18ED 621E05	FACTORY	ž š		
1	FAILURE MODE-OUT OF TO FULSES. THE FAILURE MAS UIT BOARD (F/M c7:41885- TS THAN AVERAGE.	OF TOLERANCE, DURING FINAL MISSILE CHECROUT THE 28 VOLT D.C. OUTPUT OF SMITCH 18 EDMISSIED BINARY. If has caused by a faulty bilicon-controlled rectifier (SCR), CRZ-1 ON SMITCH 18 OF THE UDATAR CIRC ISBS-801), THE FAULTY SCR (RN883) EDMISSIED BLIGHTLY HIGHER GATE-TO-CATHODE REVERSE LEARAGE CURREN	COUT THE RE VOLT D.C. LEGD RECTIFIER (SCR); TTED SLIGHTLY HIGHER	CRE-1 ON 1	SWITCH ISTHOOL POOL PEY	9 5 5 E	BITED BIMARY IE USATAR CIRC KAKASE CURREN	

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2	286681	***************************************	25		0.0000	A1.	2 4	8.04460	**************************************			
VEHICLE BITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	I LEAKAGE ME		CITORS CS, (EXCESSIVE H			(ACTIVE DECOY PLUG USJE (ATL FOUND)	E TAKEN, FA		OLLOMING ACC	7E8 40/C		
# 0 1 1		ž š	20		ž Q		CAN B	ğ ç	5	2 8		
\$17E TIME DIF	13 C#TABL	FACTORY	WTE PROH		FACTORY	OF PLUE	ACTION	FACTORY	# # # # # # # # # # # # # # # # # # #	PACTORY	MHCD.	
VEHICLE DATE DIF	MAY 15, 190	\$67503	OF ELECTRO	ę.	134F	T ON PIN S EM POSITION THE CAUSE	NO CORRECTIVI AMALYSIS GROS CONDUCTED.	119-D 621204	JURING CON	321201	1 NOT CONF.	
DIF DATA BOURCE PART NUMBER	EY-07993 RELEASED P	FAR R7-41847-W	JECTED FOR LEARAGE.	HEAT WAS NOT LEARN	FAR 27-41001-605	ED DUE TO NO OUTPUT NO OUTPUT IN THE AR I CURRENT LIMITERS.	BE DETERNINED, NO ORM THE FAILURE ANA ANALYSIS MAY BE COM	FAR	SHORTED DEODE CAS E	FAR E7-414E8-5	P TEST, FAILURE WA	
TEST/REPORT NUMBER FAILED COMPONENT NAME	CORRECTIVE ACTION-A NEW SCR SPECIFICATION CONTROL DRAWING, 27-07893 RELEASED MAY 15, 1963 ESTABLISHES LEAKAGE MEASU Rement Regulrements which will Eliminate acceptance of scrs which caused this failure.	A-99-04-4237-F C4FAC1 TOR	FAILURE MODE-STRUCTURAL. THE HIGH POWER ONE ASSEMBLY WAS REJECTED FOR LEARAGE OF ELECTROYTE FROM CAPACITORS CS, CS IND CG. NO FUNCTIONAL DISCREPANCY WAS FOUND. THE ELECTROLYTE LEARAGE WAS ATTRIBUTED TO SPPLICATION OF EXCESSIVE MEAT	CORRECTIVE ACTION-NOME, REASON FOR APPLICATION OF EXCESSIVE HEAT MAS NOT LEARNED.	A-A9-D4-3574F Current Limiter	FAILURE HODE-ELECTRICAL DPEN, PROGRAMMER 8/M 207-0188, FAILED DUE TO NO CUTPUT ON PIN S OF PLUG USJZ. POMER SUMPLY E), PROGRAMMER, S/N DUZ-0004) FAILED BY HAVÍNG NO CUTPUT IN THE ARM POSITION AT PIN W OF AS FIRE RETRO ROCKETS TEST) FAILURES MERE DUE TO BURNED-OMEN CURRENT LIMITERS. THE CAUSE COULD NOT BE	CORRECTIVE ACTION- SINCE THE CAUSE OF THE FAILURE COULD NOT BE DETERMINED, NO CORRECTIVE ACTION CAN BE TAKEN, FACTO BY PERSONMEL AND RELIABILITY ENGINEERS NORE REQUESTED TO INFORM THE FAILURE ANALYSIS GROUP INMEDIATELY IF ANOTHER FA ILURE OF THIS TYPE SHOULD COCUR SO THAT ON-THE-SPOT FAILURE ANALYSIS MAY BE CONDUCTED.	3P-99-04-404."V 51008.	FAILURE HODE-SHORT ELECTRICAL-REMOTE SET WAS FOUND TO HAVE SHORTED DIODE CRS DURING CONTINVITY TEST FOLLOWING ACCOM PLISHMENT OF SURVEY 158-62 THE REASON FOR THE SHORT IS NOT RIOMM. CORRECTIVE ACTION-UNKNOWN.	8F-98-04-4049F CIRCUIT BOARD	FAILURE MODE-OUT OF TOLERANCE, LOSIC CIRCUIT ONE FAILED DROF TEST, FAILURE NAS NOT CONFIRMED.	
SYATEH SUB-SYSTEM	CORRECTIVE ACTION-A NEW REMENT REQUIREMENTS WHICH	AUTOPILCT-SQUARE-A/B	FAILURE MODE-STRUCTURAL. AND C6. NO FUNCTICHAL DIS	CORRECTIVE ACTION-NOME.	AUTOFILOT-SQUARE-A/B	FAILURE HODE-ELECTRICAL POWER SUPPLY 2), PROGRAMM AS FIRE RETRO ROCKETS TES	CORRECTIVE ACTION- SINCE RY PESSONNEL AND RELIABIL ILURE OF THIS TYPE SHOULD	AUTOF3LOT-SQUARE-A/B	PAILURE MODE-AMORT ELECTRI PLIAMMENT OF BURNEY 152-62 CORRECTIVE ACTION-LAKNOMM.	AUTOPILOT - SAUME - A/B PROGRAMMER	FAILURE MODE-OUT OF TOLE	

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CCARECTIVE ACTION-UMENDAM.	ACAN i					
AUTOFILOT-SQUARE-A/B	SP-8D-G4-3341F 8WITCH-ARM SAFE	FAR E7-41001-979	421130 E	# L	YES NO	•• 10
FAILURE MODE-STRUCTURAL. IT WAS REPORT! HET INVESTIGATION INDICATED THAT THE BA! UNE WAS DUE TO A BEHT PIN COMMECTION THE WISALIGNMENT OF ARM-BAFE RECEPTACLES.	FAILURE HODE-STRUCTURAL. IT HAS REPORTED THAT THE ARM-SAFE SHITCH DID NOT RETURN TO THE SAFE POSITION AND THAT FURT HEY INVESTIGATION INDICATED THAT THE BAFE SIDE OF THE SMITCH WAS OPEN-CIRCUITED. THE FAILURE WAS CONFIRMED. THE FAIL URE WAS DUE TO A SENT PIN CONNECTION THAT HAD BROKEN LOOSE FROM ITS RECEPTACLE IN THE REMOTE SET COMPONENT SECAUSE OF MISALIGNMENT OF ARM-SAFE RECEPTACLES.	FE BWITCH DID NOT RETI TCH MAB OPEN-CIRCUITEI R PROM 118 RECEPTACLE	RN TO THE S. THE FAILUIN THE REMO	NFE POSITION	10M AND THAT FURT WFIRKED, THE FAIL MMONENT BECAUSE O	
CORRECTIVE ACTION-QUA CHENTS, PAYING SMECIAL NG THE USE OF 3-SMAPED LE PINS.	CORRECTIVE ACTION-QUALITY CONTROL WAS REQUESTED. IN RAR 28-50-04-3639, TO IMPROVE THE INSPECTION OF REMOTE SET COMP OMENTS, PAYING SMECIAL ATTENTION TO PROPER ALLEGMENT OF ARM-SAFE RECEPTACLES. GO/C INITIATED A DESIGN CHANGE REQUIRI NG THE USE OF 3-SMAPED JUMPER WIRES INSTEAD OF THE LONGER LOOP TYPE, THIS WILL IMPROVE THE STABILITY OF THE RECEPTAC LE PINS.	SP-9D-04-3639; TO IMPI RM-SAFE RECEPTACLES: (LOOP TYPE, THIS MILL	OVE THE IMS OCC INITIATI IMPROVE THE	PECTION C ED A DESI STABILIT	F REMOTE BET COMP EN CHANGE REQUIR! T OF THE RECEPTAC	
AUTOPILOT-SAUARE-A/B	A-89-04-3337F HOTOR-DC	FAR 86-69900-008	461123 F	FACTORY	YES GLOBE INDUSTRI	:
FAILURE MODE-FAIL TO- MID, THE WOOD SMAFT W LD MAGMETS. CGRECTIVE ACTION-RAR OH ALL PERSONGEL CONCE	FAILURE MOGE-FAIL TO OPERATE AT PRESCRIBED TIME, DURING MANGACIUMING ISSTED THE MENT ASSESSED. MIN., THE WOLCH SHAFT WOULD HOT ROTATE AND THE MOTON OPERHEATED. THE FAILURE HAS CONTRINED AND MAS DUE TO MISSING FIE LD MAGNETS. CCARECTIVE ACTION-RAR A-99-04-36-11-1, DATED HAY E: 1963, MAS PREPARED, REQUESTING MANUFACTURING INSPECTION TO CAUTI ON ALL PERSONACE CONCERNED HOT TO REMONE THE MAGNETS FROM D-C MOTORS DURING ASSENDLY OF THE MOTOR TO THE REMOTE AET	MANGACIUSING IESI UN EATED. THE PAILURE MA MAS PREPARED, REGUES I D-C MOTORS OURING ASI	THE MENT OF THE PARTY OF THE HANGE ACTION OF THE	TURING IN	DUE TO MISSING FIE NAME TO CAUTE TO THE REMOTE SET	
COMPONENT. ELECTRONIC	IC INSPECTION PERSONNEL WERE ADVISED OF THIS FAILURE.	F THIR FAILURE.				
AUTOPILOT-BRUARE-A/B PROGRAMMER PAILURE MODE-FAIL TO	ACLER-0031/L1-401-D0-124 PLIGHT 128D PALCI-1 YES AGASTAT RELAY GEIIII NO GEIII NO GEIIII NO GEIII NO GEIIII NO GEIII	FLIGHT STAT RELAY FAILED TO	1285 P. 421111	PALCI-1	YES AGASTAT HO HO HER RESET COMMAND	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PRIOR TO POMER CHANGEOVER TO INTERNAL.	VER TO INTERNAL.			•		
SYSTEM EFFECT-SWINGINE LONED THE ELECTRICAL TO	SYSTEM EFFECT-IMPROMEN DISCRETE SIGNAL, ABSENCE OF THE PROGRAMMEN RESET SIGNAL COMMAND PRION TO FOMEN CHAMMEOVER AL LONGO THE ELECTRICAL TRANSIENT DURING POMEN CHAMMEOVER TO START PROGRAMMEN.	ROCRAMER RESET SIGNAL START PROCRAMER.	COMMAND PR	2 8 8	MER CHAMECOVER AL	
VEHICLE EFFECT-NONE.	THE RESET COMMAND WAS THEN RECEIVED BY THE PROGRAMMEN (D.24 SECOND AFTER PONER CHAMBEOVER SESA JOERANNER TO ZERO.	BY THE PROGRAMER (0	EA BECOMD A	A01 R31	R CHAMBEOVER BEBA	
CORRECTIVE ACTION-UNKNOWN	MOMM.					
					PAGE 0169	т-

	PATER COMPONENT NAME	STORES LEVE	T	2000		TIME DIF OTH VENDOR PART NO	
AUTOPILOT-SQUARE-A/B	A-A8-G4-3503-F	FAR 27-41001-000	921109		7.Es		•
FAILUME MODE-ELECTRICAL TE SET (P/N E7-43205-603 PERSOMEL CYCLING THE PR 19643).	FAILURE MODE-ELECTRICAL OPEN, DURING CHECKOUT, NO PREARM BACKUP OUTPUT FROM PLUG 305U3P4-C, FAILURE CONFIRMED, REMO TE SET (PAN R7-43E05-603) HAD OPEN-CIRCUITED 51ODE BETHERN PINS 4 AND 14 ON TERHINAL BOARD 1, ATTRIBUTED TO PACTORY PERSONNEL CYCLING THE PROGRAMMER IN BAFE CONFIGURATION WHILE PLUG 304P1 WAS FURED ALLONING DIODE TO BURN OPEN (DIODE 19643).	BACKUP CUTPUT PROF PL N PINB 4 AND 14 CH TEI ILE PLUS BOAPS WAS PUI	UG SOSUSPA- HINAL BOAR	C. FAILE	ME CONTI	RHED. REHO O FACTORY WEN (DIODE	
CORRECTIVE ACTION-MOME.							
AUTOFILOT-SEUARE-A/B PROGRAMMER	A-9F-04-4011F BMITCH 11	FAR 87-48001-8	1036	7.A.T	7E 8		******
FAILURE MODE-ELECTRICAL ENTED SWITCHING TO HIGH IT BOARD.	FAILURE MODE-ELECTRICAL OPEN, SMITCH ELEVEN RELAY COLL CIRCUII WAS OPEN AT THE CIRCUIT BOARD TERMINATION. THIS PREV NYED SMITCHING TO HIGH ROLL GYNO EXCITATION, FAILURE WAS ATTRIBUTED TO BRONEN WIRE DAMAGED DURING ASSEMBLY OF CIRCU T BOARD.	INCUIT WAS OPEN AT THE ATTRIBUTED TO BROKEN	MARE BANAGE	AND TERM TO DURING	INATION. ABSENGL	THIS PREV TO CIRCU	
AUTOPILOT-SQUARE-A/B	A-89-G4-3563F CIRCUIT POARD TRAMSISTOR	#4P	421107	FACTORY	ž čs		*6036
FAILURE MODE-ERRATIC OF WAS COOL, FAILURE DUE T	FAILURE MOE-ERRATIC OFERATION, BUITCH & UAB REPORTED TO BE HEAT BENSITIVE, WORKING NORMALLY ONLY WHEN THE ASSEMBLY WAS COOL. FAILURE DUE TO A HEAT BENSITIVE &S TRANSISTOR (HATESA) RESULTING PROM A MANUFACTURING DEFECT.	BE HEAT BENSITIVE, IK (MATESA) REBULTING PRO	MRINE MORN.	TURING E	WENT THE	E ASSEMBLY	
CORRECTIVE ACTION-RAR A-99-04-3621 REQUESTI	CORRECTIVE ACTION-RAR A-99-04-1621 REQUESTING THE WINDOR TO TEST TRANSISTORS FOR HEAT BENSITIVITY AND TO IMPROVE BU	TO TEST TRANSISTORS	OR HEAT BE	15 I V I V I T I	AMD TO	IMPROVE BU	
AUTCPILOT-BAUARE-A/B PROGRAHMER	H6-88-04-3328F	FAR E7-41001-603	060120	FACTORY	9 9 9 9		
FAILUME MODE-OUT OF SPE SECOND TOO BOOM, MALFUMC	FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE-DURING PRODUCTION VIBRATION. THE PROGRAMMER APPEARED TO RESET D. BECOND TOO BOOM, MALFUNCTION NOT CONFIRMED. TWO CAUSES FOR THE FAILURE MERE POUND IN THE FACTORY TEST EQUIPMENT.	PRODUCTION VIBRATION. TO FOR THE PAILURE MERE FOR	THE PROGRAMMER APPEARED TO RESET 0.030 'OUND IN THE FACTORY TEST EQUIPMENT.	ACTORY	ED TO AE	PHENT.	
CORRECTIVE ACTION-A DET POACE LINCE IS BEIMS IN D OUT IN TEST PROCEDURE	LURRECTIVE ACTION-A DETAILED PROCEDURE FOR COMMECTIMS THE VIBRATION EXCITER AND THE PROGRAMMER TEST SET TO SEPARATE Fonce Lemes is being incorporated in Quality Control Reception 141-20-8 revo. No tolerance was previously calle D out in iest procedure cop 350.207.4; However TCA-18; Peleased NOV. 80; 1962 bets the Tolerance at 410 seconds Plus	E VIBRATION EXCITER AN CIPICATION 141-EG-5 RI LEASED NOV. EG, 1968 I	D THE PROGE	SAMER TE	187 8E7 7 18 PREVIO	O SEPARATE MUSLY CALLE CONDS PLUS	

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The state of the s		FAR E7-43001-3	4 920139			,
ZEROVHIMUS.180 SECONDS.	sections of the company of the compa	FAR R7-43801-8		The real Property lies and the least of the		312540
autofilot-Beuare-A/B Programmer	A-62-04-40-684			MAPS YES	3/ 0 9 1	***
FAILURE MODE-FAIL TO B. THE REPORTED FAILUR AUTOPILOT BYBTEM, AUT DETERMINED.	TO OPERATE AT SPECIFIED TIME, DURING MAPCHE CHECKOUT, NO FITCH GUIDANCE EMBLE SIGNAL MAS RECEIVE Lure was not caused by the autopilot programmer, but was caused by a discrepancy elsemmere in the Autopilot system problems mere eliminated by missile base personmel but the exact cause was mever	MAPCHE CHECKOUT, NO FI PROGRAMMER, BUT MAS CA MATED BY MISSILE BASE P	TCH GUIDANCE USED BY A DI ERBONNEL BUT	ENABLE BIO BCREPANCY I THE EXACT	HAL HAS RECEIVE LISEMERE IN THE CAUSE HAS NEVER	
CURRECTIVE ACTION-NON	-NOME. FAILURE HOT COMPIRMED.					
AUTOFILOT-SEUARE-A/B	NZ-A9-04-3317-F CIRCUIT BOARD, BAITCH	FAR E7-44536-3	4.0134	FACTORY YES	•	1627.00
FAILINE HODE-SHORT-EL URE UNDETERHINED, PROB ABILITY OF SMITCH 14 ?	FAILINE MODE-SHONT-ELECTRICAL, NO OUTPUT ON SMITCH 14 OF HIGH POMER & CIRCUIT BOARD P/N 27-41933-601, CAUSE OF FAIL URE UNDETERHINED, PROBABLE CAUSE 18 INADVERTENT SHORT TO GROUND DURING INITIAL RUN OF FINAL CHECKOUT RESULTING IN IN ABILITY OF SMITCH 14 TO FIRE.	OF HIGH POWER & CIRCUIT O GROUND DURING INITIAL	BOARD P/N E	7-41635-901 . CHECKOUT	RESULTING IN IN	
CORRECTIVE ACTION-NOME.	A-96-04-3502-F	FAR	421015 E	STR YES	3/05 t	*137.
FAILURE MODE-ELECTRIC CONTINED. ATTRIBUTED	FAILURE HODE-ELECTRICAL OPEN. DURING CHECKOUT, DISCONTINUITY WAS NOTED BETHEEN PIN L OF JI AND PIN'R OF JS. FAILURE COMPINED. ATTRIBUTED TO FAULTY BOLDER JOINT BETHEEN PIN R OF JS AND THE MIRE ADAPTOR COMMECTION TO PIN R OF JS.	INJITY WAS HOTED BETHEE IN R OF J3 AND THE MIRE	A PIN L OF J	ECTION TO	FIN K OF 13.	
CORRECTIVE ACTION-RAN TED, USE OF ADAPTORS O	ACTION-RAK A-98-04-3615 ISSUED. PERSONNEL TRAINING INCREASED. ALL UNFOANED TRAYS WILL BE 100 PCT. INSPEC ADAPTORS ON NEW TRAYS HAS BEEN DISCONTINNED.	RAINIM INCREASED. ALL	UNFOANED TRA	78 WILL BE	100 PCT. INSPEC	
AUTOFILUT-SQUARE-A/B PROCRAMMER	8F-9D-04-3445-F	FAR 27-41001-993	W 100139	WTR YES	5/05	****
FAILURE MODE-PREMATURE F BATTCH ZG FIRED, A PO MOMEGUS APCHE PRINTOUT.	OPERATION: THE BAIBLE CAUSE OF	BOOGTER JETTISCH (BOJ) BWITCH WAS REPORTED ACTIVATED WHEN THE BUSTAINER CUTOF THE INDICATION WAS AN ERRONEOUS BIGNAL GENERATED BY APCAE, RESULTING IN AN ER	TED ACSTVATES	APCAE, RE	SUSTAINER CUTOF	
CORRECTIVE ACTION-NOW	HOME, THE PASLURE MAS NOT CONFIBHED.					
					PAGE DIBI	 1

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DIFFICUATIES REVIEW-AUTOFILOT STATEM-AIRBORNE

		DIFFICULTIES REVIEW ACCRECOL STATES AND	FILOI STRICK-AIRBOR	¥	<u> </u>		_
SUB-SYSTEM	3	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF T	TIME DIF OTH	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	4/6	HG-DB-D4-3442-F CIRCUIT BOARD TRANSISTOR	FAR 27-41001-603	130D F.	FACTORY Y	7E8 66/C NO	*****
FAILURE MODE-CONTA RB &1 OF THE TA AND UCTED TESTE INDICATE	DHTANINAT AND 16 B ICATED NO	FAILURE MODE-COMTANINATION, SEBUENCING ERRORS WERE OBSERVED DUE TO EXCESSIVE BASE TO COLLECTOR CURRENT OF TRANSISTO RS 41 OF THE 74 AND TO BINARY COUNTERS ON CLOCK CIRCUIT BOARD AIDAI, BOTH TRANSISTONS MERE TYPE HATSSA. VENDOR COUND UCTED TESTE INDICATED MOISTURE BETWEEN THE TRANSISTOR LEADS.	I DUE TO EXCESSIVE B ID ALGAL. BOTH TRANS	ASE TO COLLISTONS MERE	ECTOR CUR TYPE HAT	CURRENT OF TRANS1370 HA7334. YENDOR COUND	,
CORRECTIVE ACTION-	104-607C	CORRECTIVE ACTION-60/C COULD NOT REPRODUCE THE FAILURE WITH OTHER TEST SPECIMENS. NO ACTION WAS TAKEN BECAUSE THE MACT CAUSE OF FAILURE COULD NOT BE DETERMINED.	OTHER TEST SPECINE	NS. NO ACTIO	ON MAS TA	KEN BECAUSE THE E	······································
AUTOFILOT-SQUARE-A/B	5	A-88-04-3431-F VIRING	FAR 27-41001-899	420927 E	# X	763	*****
FAILURE MODE-STRUC	TRUCTURAL	TURAL. WIRE TO PIN H OF J-1 BROKE AT PIN COMMECTION DUE TO TENSION AND SMEAR STRESSES.	COMMECTION DUE TO T	ENSTON AND	SHEGAR STA	£35£1.	
CORRECTIVE ACTION-	FOAMED W	COFFECTIVE ACTION-HEW HARNESS ASSCHÖLIES WERE INSTALLED IN NEMLY MANUFACTURED ITEMS AND ALL ITEMS CURRENT IN STOCK NO NOT ALREAD! FOAMED WERE SURVEYED AND REVORKED AS HEEDED.	HEYELY HAMUFACTURED	ITEMS AND A	LL 17EMS	CURRENT IN STOCK	
AUTOFILOT - SALMRE-A/B		HE-AS-OA-3450-F TRANSFORMER WIRING	FAR 27-41001-403	**************************************	FACTORY Y	TES NO	1
FAILURE MOE-STRUC . FAILCE DUE TO A B S INFEDPER HANDLING	TRUCTURAL A BROKEN TINE.	FAILURE MOES-STRUCTURAL. UNIT FAILED WHEN APPLICATION OF THE BTAGING DISCRETE SIGNAL CAUSED THE PROGRAMMER TO RESET . FAILUE DUE TO A BROKEN WIRE FROM THE CENTER TAP OF THE TRANSFORMER TO BIGNAL GROUND BUS. FAILURE CAUSE SUSPECTED A S IMPROMER HANDLING.	RE STAGING DISCRETE INSFORMER TO SIGNAL	STEHAL CAUSH FROUND BUS.	ED THE PR FAZLURE	SIGNAL CAUSED THE PROGRAMMER TO RESET GROUND BUS. FAILURE CAUSE SUSPECTED A	
CORRECTIVE ACTION		PERSONNEL IN THE MANUFACTURING AREA MERE CAUTIONED TO USE EXTREME CARE IN HANDLING THESE PARTS.	CAUTIONED TO USE EX	TREME CARE	IN HANDL I	NG THESE PARTS.	
AUTOFILOT-MOVRE-AZE	A/B	26-00-04-3435F PROGRAMER	FAR 27-41001-003	1200	E	YES 40/C NO	05.27
FAILURE HODE-PRENATURE OPERATION-THE RE MADE IN ATTEMPTS TO DUPLICATE THIS DENTAL RESET OF PROGRAMMER.	TENATURE APTS TO D PROGRAMM	FAILURE HODE-PRENATURE OPERATION-THE PROCRAMMER HAS IR/D WHEN RESET OCCURRED 30 SECONDS TO 300N. MUMEROUS RERUNS ME RE NADE IN ATTEMPTS TO DUPLICATE THIS DISCREPANCY. THE FAILURE COULD NOT BE DUPLICATED OR CONTINNED. SUSPECT AN ACCI DENTAL RESET OF PROGRAMMER.	IEM RESET OCCUMRED SI ME COULD NOT BE DUP	0 SECONDS TO	O SOOM. P	UNEROUS RERUNS NE.	
CORRECTIVE ACTION-	Co-uman	UMENCIAN. CONCERNED PERSONNEL MERE ADVISED OF THE ANALYSIS AND RESUESTED TO USE CAUTION DURING TES	OF THE AMALYBIS AN	D REGUESTED	To use c	AUTION BURING TES	
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	STRIKE DUB-STRIKE	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	11 TE 11 F	# 0 # 12	VENDOR HANE	3	
	AUTOPILOT-SQUARE-A/B PROGRAMMER	AOJ 82-00477P1-804-00-08 PROGRAMER	COUNTDOM	*16020	11	ž š			022944
,	FAILURE MODE-FAIL DURING ONTION OF COLMIDONN.	DURING OPERATION. PROGRAMMER FAILED TO GENERATE RE-ENTRY PRE-ARM BACKUP SIGNAL DURING LOOP TEST P. N.	CHERATE RE-ENTRY PRE	-ARH BACKU	P SIGNAL	2 a	MG LOOP TES	•	
	SYSTEM EFFECT-LOSS OF R	BYBTEM EFFECT-LOSS OF REDUNDANCY. BACKUP CAPABILITY FOR RE-ENTRY VENICLE BEPARATION MAS NOT GENERATED.	ENTRY VEHICLE BEPAR	ATION MAS	NOT GENE	87.2			
	VEHICLE EFFECT-COUNTDON	VENICLE EFFECT-COUNTDOM ABORTED AND RESCHEDULED.							
	CORRECTIVE ACTION-UNKNOWN.							1	
	AUTOFILOT - SQUARE - A/B PROGRAMMER	A-98-04-3397-F CIRCUIT BOARD-BIODE	FAR E7-41001-989	8F 920914	ETA	¥ 6			*176.
	FAILURE MODE-SMORT CAUS R MAS IR/D. THE UNIT MAS BY SMORT CIRCUIT ON THE	FAILURE MODE-SHORT CAUSE FAILURE DURING OPERATION, NO CUIPUT WAS OBTAINED FROM PRE-ARM BACK-UP SMITCH THE PROGRAMME. R MAS IRJD. THE UNIT MAS OPENED AND THE CUIPUT DICCNE ON THE PRE-ARM BACKUP SMITCH WAS OPEN-CIRCUITED. FAILURE CAUSED BY SHORT CIRCUIT ON THE CUIPUT LINE.	OT WAS COTAINED FROM PRE-ARM BACKUP SMET	CH MAS OPE	ACK-UP BE	<u>2</u> 5	THE PROGRAI FAILURE CAUS	¥Ş	
	CORRECTIVE ACTION-BANE R SHORT CIRCUITS.	CORRECTIVE ACTION-BASE PERSONSEL WERE NOTIFIED OF THIS AMALYSIS AND WERE RESUESTED TO CHECK THE MOHITORING LINES FO SHORT CIRCUITS.	LYBIB AND NERE REBUE	87ED TO CH	ECR THE	T I HO	ORING LINES	٤	
	AUTOFILOT - SQUARE - A/B	1X-98-04-3443-F CIRCUIT BOARD BAITON	FAR ET-41635-3	420034		E Q	J/03		
	FAILURE MODE-PREMATURE TURELY, FUNCTIONAL TESTI	FAILURE MODE-PREMATURE OPERATION, A HIGH POWER 2 ASSEMBLY REPORTEDLY FAILED WHEN THE NIGHLEVEL F SMITCH FIRED PREMA Unely, Functional Testing and Vibration tests could not repeat the problem.	REPORTEDLY FAILED WHERE THE PROBLEM.	CN 746 H36	HEVEL F	ž	S FIRED PR	1	
	CORRECTIVE ACTION-NOME.	FAILURE NOT CONTINED.							
,	AUTOPILOT - SQUARE - A/B PROGRAPHER	A-89-D4-V418-F	FAR B7-40901-4	420022	FACTORY	£ 5			*****
1	FAILURE MODE-OPEN (ELEC LATE-THROUGH-MOLE PONTIO THE INSTALLATION OF A BO	PAILURE MODE-OPEM (ELECTRICAL). PROGRAMMER CIRCUIT BOARD OPENED WHEN THE PRINTED CIRCUIT LAND BACKE ANAY FROM THE P Late-through—mole portion of the printed circuit. This circuit board was remored two years prior to Pailure before The installation of a bonded remork area and improved controls.	FENED WHEN THE PRINT J'T BOARD WAS REWORK JLS.	ED CINCUIT	LAND BAC	¥ 0	LAY FROM THE AILURE BEFOR	. y	
	CORRECTIVE ACVION-INSPE	CORRECTIVE ACVION-INSPECTION PERSONNEL MERE INSTRUCTED TO USE EXTREME CARE WHEN REMORKING CIRCUIT BOARDS.	JAE EXTREME CARE WHE	N REMORETH	4 CIRCUI	ð	ND 8.		
·		·					PAGE 0:03	:	

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STETEN SUB-STETEN	TEST/REPORT NUMBER FAILED COMPONENT HANK	DIF DATA SOURCE PART NUMBER	DATE DIF T	11ME 01F 01M	OTH VEHOOR PART NO	
AUTOFILOT-SAUARE-A/B PROGRAMER	H6-88-04-3338F PROGRAMER SMITCH NO. R	FAN 27-41001-987	3 418029	8 3 3		***
FAILURE MODE-OUT OF SP GED FROM 12.5 WOLTS DC E WAS NOT COMPTIMED SUS	FAILURE MODE-OUT OF SPECIFICATION-PROGRAMMER NO. E SWITCH OUTPUT AT STAGING TIME, PLUS S.T SECONDS SHOULD HAVE CHAN SED FROM 12.5 VOLTS DC TO -8 VOLTS DC. THE SM. VOLTAGE CHANGE MAS FROM PLUS 12.5 VOLTS DC TO PLUS & VOLTS DC. E WAS NOT COMPTENED SUSPECT REVERSED METER LEADS DURING TEST.	TCH OUTPUT AT STAGING CHANGE MAS FROM PLUS 11	716K, PLUS B.	r seconds s	HOULD HAVE CHAN	
CORRECTIVE ACTION-SITE	H-SITE MAN HOTFIED OF POSSIBLE REVERBAL OF METER TEST LEAGS. BITE PERSONNEL DID NOT AGREE THIS COURSE FAR HG-89-64-3345F WHICH FOUND FAILURE IN TEST EQUIPMENT.	AL OF METER TEST LEADS.	. BITE PENSON	4EL 010 NO	AGREE THIS COU	
AUTOFILOT-SQUARE-A/B	HG-82-04-3345F PROGRAMMER BATTCH	FAR 27-41001-967	1130 E	S ON		984738
FAILURE MODE-OUT OF TO AGE BAITCHED TO PLUS B 8 TEST MHEN LIME VOLTAG	FAILURE MODE-OUT OF TOLERANCE. THE PROGRAMMER SM MOLE FAILED TO CHANGE PROM PLUB 12.5 VDC TO -8 VOLTS. INSTEAD VOLT AGE SMITCHED TO PLUS & VOLTS (REF FAR HG-98-04-3338F), POLND TEST EQUIP MITH LOM SENSITIVITY MOULD GIVE MO-GO ON THI 8 TEST WHEN LIME VOLTAGE WAS 113.3 VOLTS, ALTHOUGH MORMAL RAMGE OF TEST EQUIPMENT LIME VOLTAGE IS 115 TO 116 VOLTS.	FAILED TO CHANGE FROM POIND TEST ESHIP MITH AL RANGE OF TEST ESHIP	PLUB 12.5 VDC ,OH SENSITIVI MENT LINE VOL	TO -8 VOL. TY WOULD GI	PROM PLUS 12.5 VDC TO -8 VOLTS. IMSTEAD VOLT WITH LOM SENSITIVITY WOULD GIVE NO-GO ON THI EQUIPMENT LINE VOLTAGE IS 115 TO 118 VOLTS.	
CORRECTIVE ACTION-TEST	M-TEST EQUIPMENT TO DE REPAIRED.				engantenna en	
AUTOFILOT-SQUARE-A/B	A-99-04-3487 HI-POMER B BUSTCH MELAY	FAR 27-41440-811	4 519039	FACTORY YES		86493
PAILURE MODE-ERRATIC C LAY (K.S) (P/M 86-75900- THE RELAY MAS IMADVERIE	PAILURE MODE-ERRATIC OPEXATION. THE HIGH FOMER 3 ABBENGLY REPORTEDLY FAILED. IT WAS REPORTED THAT THE EXCITATION RE LAY (K3) (P/M 86-73500-687) EXHIBITED STICKY OPERATION. THE FAILURE WAS CONFIRMED. HOMEVER, DURING FAILURE AMALYBIS THE RELAY WAS IMADVERIENTLY DESIROYED AND THE CAUSE OF THE FAILURE COMED NOT BE DETERMINED.	BLY REPCKTEDLY PAILED. THE FAILURE WAS COMFI THE FAILURE COULD NOT	IT WAS REPORTINED. HOMEVER	TES THAT TE	E EXCITATION RE ILURE AMLYBIS	
CORRECTIVE ACTION-NOME.						
AUTOPILOT - BEUARE - A/B PROGRAMMER	A-89-04-3533F ACCELEROMETER-PUNCTIONAL	FAR 27-41204-5	983914 F	FACTORY YES	EDCLIFF INSTRU HENTS 109317H	<u>:</u>
FAILURE MODE-OUT OF SP CCELEROMETER DID NOT ME WDC.	OF SPECIFICATION. THE OUTPUT VOLTAGE BECAME UMSTABLE AND ERRATIC. THE PAILURE MAS COMPIRMED. THE MOT MEET THE PULL BCALE OUTPUT REQUIREMENT OF 25 PLUS OR HIMUS B.S VDC. THE MAXIMUM REACHED WAS 24	BECAME UMBTABLE AND EN MENT OF 25 PLUS OR HTH	18 0.8 VDC. T	TOURE NAS CHUM	THE PAILUKE MAS CONFIRMED. THE A VDC, THE NAIGHUM REACHED WAS 24	
CORRE TIVE ACTION-NOME.	3					
diameter of the state of the st					PAGE DISS	
	der de la company de la compan	Advention of the second se	and the section of th	A THE PERSON ASSESSMENT OF THE PERSON ASSESSME	recommendate from the control of the	1

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STRIEM SUR-SYSTEM	TEST/REFORT NUMBER FAILED COMPONENT MANE	DIF DATA SOURCE PART NUMBER	VOHICLE DATE DIF	3176 1106 01F	# 5 8 5	VENDOR PART NO	· · · ·
AUTOFILOT-SetuRE-A/B	ST-SS-SS-SS-F	FAR 87-40117-1	420614	FACTORY	# Q		****
PAILURE MODE-CONTAMINATION. AS DETERNINED THAT THE SILLCO BSA HAO SEVERAL LOCSE WELD S FIRE MITMOUT AN IMPUT BIGNAL.	FAILURE MODE-CONTAKHATION, IT WAS REPORTED THAT SWITCH 19 ON THE HI-POWER & ASSUMBLY WAS VISRATION REMBITIVE, IT M AS DETERBINED THAT THE SILICON-CONTROLLED RECTIFIER (SCR) OF SWITCH 19 WAS VISRATION SENSITIVE, THIS SCR (GE-2M6S3/C 35A) HAD SEVERAL LOCSE WELD SPLADMES PRESENT INTERNALLY, WHEN VIBRATED THESE LOCKE PARTICLES MOULD CAUSE THE SCR TO FIRE WITHOUT AN IMPUT SIGNAL,	119 ON THE HI-POMER 4 12 OF BHITCH 19 WAS VIB WHEN VIBRATED THESE LI	ASSCHBLY MARATON SEMI	AS VIBRAT SITIVE, T CLES MOUL	2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	ENSITIVE, IT M CR (46-2M683/C SE THE SCR TO	
CORRECTI'S ACTION-5.E.	. TO 100 PERCENT X-RA! ALL DEVICES BHIPPED TO 60/C.	HIPPED TO 60/C.					
AUTOFILOT-SQUARE-A/B	A-86-04-3181F	FAR 87-41001-988	96.0409	E78	1 9	5/Q 3	*
FAILURE MODE-FAIL DURI APPLICATION OF MISSILE	FAILURE HODE-FAIL DURING OFERATION. THE PROGRAMMER WAS IR7D FOR FAILURE OF THE ZERO-TIME INDICATOR TO STAT ON AFTER APPLICATION OF MISSILE POWER. FAILURE WAS HOT CONFIRMED.	IR/O FOR FAILURE OF THE	C 2600-11M	r 1001ca1	2 8	STAT ON AFTER	·····
CORRECTIVE ACTION-FAILURE NOT CONFIRMED.	LURE NOT CONFIRMED. NO CORRECTIVE ACTION TAKEN.	ACTION TAKEN.					·
AUTOFILOT-SAUARE-A/B	A-99-04-3418-F CIRCUIT BOARD TRANSISTOR	FAR 87-41598-803	****	FACTORY	2	MESTRAN Censene	:
FAILURE MODE-STRUCTURAL, ERRETIC ACKED COLLECTOR-TO-BASE JUNCTION.	FAILURE MODE-TIRUCTURAL. ERRATIC OFFRATION OF CIRCUIT BOARD DUE TO VIBRATION SENSITIVE TRANSISTOR RESULTING FROM CR CRED COLLECTOR-TO-BASE JUNCTION.	CARD DUE TO VIBRATION	3EH3171 VE	TRANS I 3 TC	Š.	ULTING FROM CA	
COMMECTIVE ACTION-NEW	REVERAL FAILURES OF THE MESTRAH CRUESS TRANSISTOR RESULTED IN THE ELIMINATION OF MESTRAN AS AN	32 TRANSISTON RESULTED	14 74E EL	INIMATION	8	ESTRAN AS AN A	
AUTOFILOT - BELIARE - A/B PROGRAMMER	A-49-04-3304F CIRCUIT BOARD-0100E	FAR 27-43901-3	10000	PACTORY	ğ Q		•
FAILUR, HODE-FAIL TO C AILURE ANALYSIS FOUND F 1 AND CRIE WHICH HAD BE	FAILUM. HODE-FAIL TO OPERATE AT PRESCRIBED TIME, A/P PROGRANMER DID NOT GEHERATE RE-ENTRT OR RETROROCKET BIENALB. P AILURE AMALYSIS FOUND FAULTY CIRCUIT BOARD UDAIDAE IN PROGRANMER CLOCK, CAUSED BY INCORRECT INSERTATION OF DIODE CRI 3 AND CRIE NHICH MAD BEEN INSTALLED ONE BPACE TO RIGHT. FAILURE FOUND DURING FINAL CHECKOUT.	IGGRANNER DID NOT GENER IGGRAINNER CLOCK, CAUSED FAILURE FOUND DURING F	ATE RE-ENTI BY INCORR! BHAL CHECK!	RY OR RET ECT INSER DUT.	ROROC 7A710	RET BISMALB. F H CF DIODE CRI	
CORRECTIVE ACTION-BOAR	BOARD LEWEL TEST SET MODIFIED TO TERT FOR THIS TYPE OF ERROR.	FOR THES TYPE OF ERRO	:			es espirit in interprient de la constitución de la constitución de la constitución de la constitución de la co	
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	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	POPILOT SYSTEM-AIRBOR	Ā		ſ
ATATEM NUE-BUS-BUS	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	PRI VENDOR NAME OTH VENDOR PART NO	. 1
autofilot-bauare-a/B Programmer	A-8N-DA-3477-F	7.4.8 87-48801-8	800039	YE& 60/C NO	:
FAILURE MODE-OUT OF TOLI D TO BE OUT OF TOLERANCE IVOLTS-WELL MITHIN SPECE	FAILUME MODE-OUT OF TOLERANCE, PROGRAMMER WAS 1870 WIEN THE PITCH PROGRAM OUTPUT VOLTAGE AT THE TENTH STEP MAS FOUM O TO BE OUT OF TOLERANCE, FAILURE ARALTRIB TESTED UNIT AND FOUND NO STEPS OUT OF TOLERANCE, HIEP 10 MEASURED 11 MELL IVOLTS-WELL MITHIN SPECIFICATION.	WES TRED WHEN THE PLICH PROGRAM OUTPUT VOLTAGE AT THE TESTED UNIT AND FOUND NO STEPS OUT OF TOLERANCE, HIEP	UT VOLTAGE AT THE TI F TOLERANCE, HTEP 14	TEHTH BIEP WAS FOUN 10 MEASURED 11 MELL	
CORRECTIVE ACTION-FAILUR AUTO*1LOT-SQUANE-A/B PROGRAPMER	FAILURE HOT COMFIRMED. NO CORRECTIVE ACTION AS SITE IS MOM BOLD OFF TO AIMFORCE. AA62-0074/Pt-6CO-03-07 AUTOPILOT PROGRAMMER WIRING AUTOPILOT PROGRAMMER WIRING	TION AS SETE IS MOM S COMPOSITE-B FACT	3.0 OFF TO ASHFORCE 7F 11 6E0804	. 99	***
FAILURE NOSE-PREMATURE (FAILURE MOE-PREMATURE CPERATION, WHEH ARM SIGNAL WAS SENT TO PIGGYBACK POD, THE AUTOPILOT PROCRAMMER WOULD START. RIMAKY PROBLEM WAS IN PIGGYBACK POD CIRCUITRY, ARH BIGMAL WAS HARD-WIRED TO THE OWE INCH RIVE CIRCUIT.	IT TO PIEGYBACK POD, T	HE AUTOPILOT PROCRAI E ONE INCH RISE CIR	MER MOULD START.	
	STRIEM EFFECT-INFROMER DISCRETE RIGNAL. PROGRAMMER START OCCURRED EARLY. WENICLE EFFECT-COMPOSITE DELATED.	OCCURRED EARLY.	į		
CORRECTIVE ACTION-17% LAUGHLOT-100-17% LAUGHLOT-SAUARE-A/M	A-89-04-3381-F GO TIE BACK MINE TO FRETENI THE COMMITTEES OF STATE	FAR 27-41435-3	FACTORY	7E3 10	1
FAILURE MODE-SIRUCTURAL ROF TEST, TRAHSISTOR 48, NT BETWEN THE BASE PLATI JOINT CONTRIBUTING TO ST	FAILURE MODE-STRUCTURAL FAILURE LEAD TO ERRATIC OPERATION. THE PITCH & CIRCUIT BOARD WAS REJECTED AFTER FAILING A D ROP TEST, TRANSISTOR 98, A CERIZER HANNFACTURED BY MESTRON WAS FOUND TO DE ELECTRICALLY INTERMITTENT, THE SOLDER JOI NY DETWEEN THE BASE PLATE OF THE TRANSISTOR AND ITS MOUNTING PIN WAS BROKEN. VERY LITTLE SOLDER WAS UBSERVED AT THE JOINT CONTRIBUTING TO STRUCTURAL MEANMESS.	. THE PITCH E CIRCUIT I WAS FOUND TO BE ELEC NG PIH WAS BROKEN. VE	BOARD WAS REJECTED REJCALLY ENTERNETE RY LITTLE BOLDER WAS	AFTCR FAILING A D IT. THE SOLDER JOI 1 UBSERVED AT THE	
CORRECTIVE ACTION-THE VE	VEHICR OF THE CENIEJE TRANSISTOR WAS REMOVED FROH THE APPROVED LIST OF SUPPLIERS.	S NEHOVED PROH THE AP	ROVED LIST OF SUPPI	iras.	
AUTOPILOT-BRUNE-A/B	BF-AB-CIA-URBSF TRANSFCREEK	FAR E7-41000-651	2150 FACTORY 420727	22	******
PAILURE MODE-ELECTRICAL NOIMES A WIRING ERROR W TE, THIS REBULTED IN SHO	FAILURE MODE-ELECTRICAL BHORT. EMBINES MOULD MULL WITH SOOD PSIG APPLIED. POWER TRANSFORMER HAD OPEN AND SHORTED MI NDINGS. A WIRING ERROR UNS FOUND IN POWER TRAILER UNION CAUSED MELAY KAOS IN NISSILE WIRING MARNESS TO FAIL TO OPERA TE. THIS RESULTED IN SHORT CIRCUIT ON A PHASES OF 400 CYCLE LINE.	OO PBIG APPLIED, POME UBED AELAY KAOS IN NI E LINE:	t transpormer had on Belle Wiring Harnes	EN AND SHORTED HE TO FAIL TO OPERA	
CORRECTIVE ACTION-WIRING	COMMECTIVE ACTION-WIRING ERROR WAS CORRECTED IN POMER TRAILER.	11.64.	langer editionality lang despite; d'estrate l'estrate d'estrate despite; d'estrate despite; despite; d'estrate	aprilationillises , Marin, aggetti au Anna Historie popilisti particolori angue	
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XII. & A B	TEST/REPORT NUMBER DIF DATA BOUNCE Y	DIF DATA BOUNCE	EHICLE	
\$00-3787£#	PATLED COMPONERT NAME	PART NUMBER	DATE DIF TIME DIF O'M VENCON PART NO	- T
AUTOFILOT-SQUARE-A/B	A-08-04-99889	FAR R7-43901	SECTES SCHILLIN YES GOVE 6 MG	;
FAILURE HOOK-FAIL DURI	FAILURE HOSE-FAIL DURING OPERATION, DURING PAPCHE CHECKOUT PROGRAMMER \$7N EGG-5130 WAS IR7D FOR NO-GOS RECEIVE ING CHECKS OF PITCH-YAN GUID'NEE ON AND PITCH GUIDANCE PHABE, FAILURE ANALYBIB COOLD NOT FIND REPORTED FAILURE,	PROGRAMER S/N EGA- E. FAILURE ANALYBIB	FAILURE MOE-FAIL DURING OPERATION, DURING PAPCHE CHECKOUT PROGRAMMER 8/N 204-0130 WAS IR/D FOR NO-608 RECEIVED DUR NG CHECKS OF PITCH-YAN GUID'NCE ON AND PITCH GUIDANCE PHABE, FAILURE ANALYBIS COULD NOT FIND REPURTED FAILURE,	
CORRECTIVE ACTION-WOME.		ye be		
AUTOFILOT - SQUARE - A/B PROGRAMMER	SP-A9-DA-UE94F TRANSFORMER	FAR 27-41001-\$73	E15D FACTORY NO GD/C RE0723 NO	*
FAILURE HODE-ELECTRICAL RELAY KAOS IN MISSILE HAN WER MERE SHORTED.	L SHORT-400 CYCLE INPUT WAS SHORTED. ARNESS FROM OPERATING THEREBY CAUSIM	CAUSED BY WIRING EI G SHORTS ON 400 CYCI	ICAL SHORT-400 CYCLE INPUT HAS SHORTED. CAUSED BY WIRING ERROR IN FOMER TRAILER HHICH PREVENTED. E HARNESS FROM OPERATING THEREBY CAUSING SHORTS ON 400 CYCLE LINE, POMER TRANSFORMERS IN PROGRAM	
CORRECTIVE ACTION-WIRIT	RING ERROR MAS CORRECTED IN POMER TRAILER.	רנטי		
AUTOPILOT-SQUARE-A/B	A-99-04-3313F CARCUIT BOARD	FAR R7-41847-3	420723 FACTORY YES	*****
FAILURE MODE-FAILED DU FAILURE COALD MOT BE COI N UMENDAM SOURCE,	DURING OPERATION, HI POMER 1 ASSEMBLY REPORTEDLY FAILED DURING CONTIRNED. THOUGHT TO BE CAURED BY FAULTY TEST EQUIPMENT OR BY	REPORTEDLY FAILED DI LTV 1EST EQUIPMENT O	DURING OPERATICH. HI POMER 1 ASSEMBLY REPORTEDLY FAILED DURING A MANJFACTURING VIBRATION TEST. CONTRNED. THOUGHT TO BE CAURED BY FAULTY TEST EQUIPMENT OR BY A TRANSIENT ELECTRICAL PULSE PRO	
CORRECTIVE ACTION-MONE.	CORRECTIVE ACTION-NOME, FACTORY PERSONNEL INFORMED OF RESULTS OF	LTS OF ANALYSIS.		1
AUTOFILOT - SQUARE-A/B PROGRAMMER	A-A8-06-3388-F	FAR 27-43801-3	REG719 FACTORY NO GD/C	70.00
FAILURE MODE-OUT OF TOI THE EMPECIED TIME T PLUI E MAB ALBO REPORTED IN F	TOLERANCE, THE PROGRAMMER WAS REJECTED LUS 2, FAILURE WAS CAUBED BY FAULTY PR M FAR A-AB-D4-3385-F.	BECAUSE THE ROLL PS OCHAMMER TAPES IN TV	TOLGRANCE, THE PROGRAMMER WAS REJECTED BECAUSE THE ROLL PROGRAM STARTED AT T PLUS S INSTEAD OF PLUS 2. FAILURE WAS CAUSED BY FAULTY PROGRAMMER TAPES IN THE TEST EQUIPMENT. THIS TIPE OF FAILUR IN FAR A-AB-D4-3588-F.	
CORRECTIVE ACTION-EBUIF	UIPHENT PROCEDURES WERE CHANGED TO RES TAPES.	UIRE AN AUTOMATIC BO	CORRECTIVE ACTION-EBUIPMENT PROCEDURES WERE CHANGED TO RESUIRE AN AUTOMATIC 30-DAY CLEAN UP, INSPECTION AND EVALUAT ON OF THE PROCRAMMER TAPES.	
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BUD-SIBTEM AUTOFILOT-SQUARE-A/B PROGRAPHICA FAILURE MODE-ELECTRICA FAULTY TRANSFORMER ON MINOTHES. CAUSE OF FAI	SUB-STREE BY FAILED COMPONENT NAME FART NOMBER DATE DIF 11 ME DIS DISTRIBUTED FANT NAME TO TOTAL DATE DISTRIBUTED FOR TANK NAME TO THE THANSFORMER A-8L-04-3338F CIRCUIT BOARD TRANSFORMER EFFACTOR EFFACTOR NOT BE NULLED. FUNCTIONAL TESTING REVEALED FALLY THANSFORMER ON THE HI-FOMER I CIRCUIT BOARD P/N EF-41847-3. THE TRANSFORMER HAD SHORTED PRIMARY TO BECOMDARY WINDINGS. CAUSE OF FAILURE WAS POOR TRANSFORMER WINDING TECHNIGUES AND INADEQUATE INSPECTION. CORRECTIVE ACTION-THE TRANSFORMER VENDOR-A.C. ELECTRONICS WAS INFORMED OF THE FAILURE REF RAR A-8L-04-723.	FAR E7-43901-3 FITCH GVRO COULD NOT B 7-41847-3. THE TRANSFO TECHNIQUES AND IMADEQU TECHNIQUES AND IMADEQU FAR FYAS E7-43901-3 GRANDER (8/M 111-7037)	E NULLED. E NULLED. RHER HAD SA ATE INSPECTOR HAS IR/O HAS IR/O WATED FAILUR TED FA	LINCOLN YES 60/5 LINCOLN YES 60/5 FUNCTIONAL TESTIN WORTED PRIMARY TO FINAL F RAR A-9L-04-728 SCHILLIN YES 60/6 6 NHEN THE ROLL-60/11 RE.	GEOTOT LINCOLN YES GO/C HULLED, FUNCTIONAL TESTING REYEALED HER HAD SHORTED PRIMARY TO SECONDARY TE INSPECTION. GEOTOG SCHILLIN YES GO/C GEOTOG SCHILLIN YES GO/C MAS IR/D WHEN THE ROLL-GUIDANCE ENAB TED FAILURE.	
MODE-ELECTRICA TRANSFORMER ON S. CAUSE OF FAI	L SHORT, PROGRAMMER REJECTED HMEN THE HI-FOMER 1 CIRCUIT BOARD P/N E LURE HAS POOR TRANSFORMER WINDING TRANSFURMER VENOOR-A.C. ELECTRONIC	PITCH GYRO COULD NOT B 7-41847-3. THE TRANSFO TECHNIQUES AND INADEQU FAN B INFORMED OF THE FAN E7-43901-3	E NULLED. AMER HAD STATE INSPECTOR MAS IR/D MAS	FUNCTIONAL CONTED PRI TION. F RAR A-BL BCHILLIN I 6 F	TESTING REVEALED HARY TO SECONDARY -04-725. ES 60/C D OLL-GUIDANCE ENAB	
	TRANSFURNER VENDOR-A.C. ELECTRONIC	E MAS INFORMED OF THE FAR R7-45901-3 GRADDER (8/M 111-7037)	SEGTOS SE	CHELLEN THE PRESENTE	ES GO/C D OLL-GUEDANCE ENNE	
CORRECTIVE ACTION-THE		FAR R7-45901-5 GRAPPER (8/N 111-0097)	WAS IR/O	SCHILLIN SCHILLIN HEN THE P	ES GO/C ID OLL-GUTDANCE ENNE	444
AUTOFILOT-SQUARE-A/B PROGRAHACR	A-8K-04-3369F	GRANDECR (S/N 111-0057)	MAS 18/0 I	HEN THE !	OLL-GUIDANCE EMB) }
FAILURE MODE-FAIL TO O	FAILURE MODE-FAIL TO OMCRANE AT PRESCRIBED TIME. THE PROGRAMMER (S/N 111-7037) WAS IR/D WHEN THE ROLL-GUIDANCE EMAS LE SIGNAL WAS RECEIVED LATE. FAILURE AMALYSIE TESTS COULD NOT CONFIRM THIS REPORTED FAILURE.	NOT CONTINH THIS REPL				
CORRECTIVE ACTION-NOME.	e de la companya de La companya de la co					-1
AUTOPILOT-SQUARE-A/B	SF-A9-04-3246-F CIRCUIT BOARD-TRANSISTOR	FAR 27-41001-963	1360	FACTORY	9 9	10176
FAILURE MODE-SHORT UEL UMBILICAL ON VEHICLE C	FAILURE MODE-SHORT GLECTRICAL). TRANSIBTOR 610 ON THE ABAR BOARD MAS SHORTED. SHORT MAS ATTRIBUTED TO USE OF MROME UMBILICAL ON VEHICLE CAUSING GROUNDING OF 30513130.	BAR BOARD WAS BHORTED.	840 TROM	ATTRIBUT	D TO USE OF MROM	
TIVE ACTION-UNKN	CORRECTIVE ACTION-LAKNOWN, STEPS WERE TAKEN TO PREVENT USE OF WROWG UNBILLICAL.	SE OF WROVE UMBILICAL.				 1
AUTOPILOT-SQUARE-A/B	AE62-0657 TIMER	COUNTDOM	210 960922	K T	768	27976

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STRIEN EFFECT-OPERATION STOPS PREMATURELY. VEHICLE EFFECT-LAUNCH COUNTDOMN DELAYED.

CORRECTIVE ACTION-DIGGE REPLACED.

GENERAL DYNAMICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORME

Z 31 a 1 a	THE TROUBLE	DIF DATA SOURCE	VEHICLE	3176		PRI VENDOR NAME	
AUTONION - NYSTEM	A-04-04-1244F	FAR HOMBER	420482	FAC TORY		,	18181
PROGRAMMER	CIRCUIT, LOGIC-6	#7-45KO1-9#			ş		
FAILURE MOE-PRE'AJURE IBUTED TO HUMAN ERROR.	E CPERATION. PROGRAMMER REBET 'O ZERO TIME AFTER 108 BECOMDS. REF. 18 853482. FAILURE WAS ATTR	NO TIME AFTER 108 SEC	O-DS. REF.	18 B5344	E. FAILU	RE UND ATTR	
CORRECTIVE ACTION-NOME.							4
AUTOPILOT - SQUARE-A78 PROGRAMMER	A-94-54-5859F	FAR E7-43901-3	316	DAFB	ž 8		
FAILURE HODE-OUT OF TO -41074, PAPCHE CHECK OF WAS ATTRIBUTED TO HOLE	FAILURE HODE-OUT OF TOLERANCE, PROGRAMMER WAS REJECTED BECAUSE ENGINES CYCLED CONTINUOUSLY DURING PERFORMANCE OF 27 41074, PAPCHE CHECK OF AUTOPILOT GAVE PROGRAMER NO-60, NO DISCREPANCY WAS POUND IN AMALYSIS OF PROGRAMMER, FAILURE WAS ATTRIBUTED TO HOSSTURE IN UMBILICAL COMMECTOR.	ECAUSE ENGINES CYCLED NO DISCREPANCY WAS FO	CONTINUOU	MLY DURIN	K PERFOR	MANCE OF 27 ER. FAILURE	**************************************
CORRECTIVE ACTION-PROG	NGGRAMMER FAILURE NOT CONFIRMED, CONNECTORS WERE DRIED OUT.	ECTORS NERE DRIED OUT	•				
AUTOFILOT - SQUARE-A/B	A-86-04-3267F	FAR 27-43901-3	420413	DYESS	YE\$ 60/C NO	U	*****
FASTURE MODE-FASLED TO ITE 04. REPLACEMENT PRO	FASTURE MODE-FAILED TO CHERATE AT PRESCRIBED TIME, PROGRAMMEN FAILED TO REBET TO ZERO TIME & TIMES IN 12 TRIES AT ITE 04, REPLACEMENT PROGRAMMER OPERATED PROFESTY.	IAMMEN FAILED TO REBET	TO ZERO T	¥ .	ES IN 12	TRIES AT S	
CORRECTIVE ACTION-LONE.	ı.						
AUTOPILOT-SQUARE-A/B	HG-A9-D4-3212-F BMITCH	FAR 27-41001-967	1130	FACTORY	8 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ASTRONAUTICS E7-41001-967	******
FAILURE HODE-FAIL DURI	FAILURE HODE-FAIL DURING OPERATION. NO GUTPUT PROM BAITCH 13 DUE TO FAULTY ACCESSORY.	24 13 BUE TO FAULTY AC	CESSORY.				
CORRECTIVE ACTION-CHECKO BLEN OF MORT-CIRCUITING.	CORRECTIVE ACTION-CMECKOUT PROCEDURES SROUP REGUESTED TO REDEBISM ALL PYROTECHNIC TEST ACCESSORIES TO ELIMINATE PRO LEM OF SMORT-CIRCUITING.	REDEBISM ALL PYROTEC	HAZC YEST	ACCE 89OR	E3 70 EL	ININATE PRO	
					•		
						PACE 0150	

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

			a Colonian	3116	PRI VENDOR NAME	
######################################	FAILED COMPONENT NAME	PART NUMBER	DATE DIF TIME BIF OTH	0 14 0	VENDOR	
AUTOFILOT-SQUARE-A/B PROGRAMER	A-80-04-8878F	FAR 27-43901-3	67E 620612	99		:
FAILURE MODE-ELECTRICAL SHORT-TWO PROGRAMMERSPOWER SWITCHES IN THE PITCH, TAN, AND ROLL, BO AUSED BY SHORT CIRCUIT IN MAS EMBINE RELAY BOX.	RICAL SHORT-TWO PROGRAMMERS FAILED ON STE DURING CHECKOUT. THEY GAVE NO OUIPUT SIGNAL PROM THE HI The Pitch, yaw, and roll. Both programmers had cas, cas, cas, rs;, rs, and rs? and rss. Failure has c Uit in haa emgine relay box.	E DURING CHECKOUT. T RB HAD CRS, CRS, CRS	HEY GAVE NO	OUTPUT BI	IGNAL PROM THE HIS	,
CORRECTIVE ACTION-UNKNOWN.	yes.					
AUTOPILOT-SQUARE-A/B PROGRAPHER	A-9M-04-5309F CIRCUIT BOARD	FAR E7-43901-3	197	9		****
FAILURE MODE-FAIL TO OPER CHE TEST. A MISWIRED UMBLE CUIT MODILES WERE DAMMEED.	FAILURE MODE-FAIL TO OPERATE AT PRESCRIPED TIME. THE PROGRAMMER WOULD NOT LEAVE THE ZERO TIME POBITION DURING A MAP CHE TEST. A MISWIRED UMBILICAL JUNCTION BON REBULTED IN INCORRECT WOLTAGES BEING APPLIED TO THE PROGRAMMER. POUR CIR CUIT MODULES WERE DAMMED.	ORRECT WOLTAGES BEIN	E THE ZENO TIME 4 APPLIED TO THE	7114E POS1	HON BURING A HAP	Cons. Addition was the
CORRECTIVE ACTION-BASE	PERSONNEL REVINED THE U	CTION BOX ON \$17E.				
AUTOFILOT-SQUARE-A/B	A-9H-04-3230F	FAR 27-43901-3	, 50003	SCHILLIN NO	3/03 0	801749
FAILURE MODE-FAILED DUR UMENTED, NO FAILURE MAS	FAILURE MODE-FAILED DURING OPERATION-NAPCHE DID NOT 8TEP PAST CARD 352 IN DECK 451-503. FUNCTION FAILED WAS NOT DOC MENTED. NO FAILURE NAS FOUND IN PROGRAMMER. A FAILURE OF MAPCHE WAS SUSPECTED.	PAST CARD 352 IN DECK MAPCHE MAB BUSPECTED.	451-503. F	MCT104 F	NILED WAS NOT DOC	
CORRECTIVE ACTION-UNRINGHA	·ex		e de la composition della comp			
AUTOFILOT-SQUARE-A/8	A-9D-34-52864F	FAR 27-41001-985	6/ E	ETR ETR ON	YES 60/C	*******
PAILURE HODE-STRUCTURAL-PROCRAMMER as acculting from PRESS FIT BUIMING.	TURAL-PROGRAMMER UNA REJECTED FOR CRACKA IN MOUNTING FEET. CRACKA MERE ATTRIBUTED TO TENAILE STRE Ress fit Buimlime.	IN MOUNTING PEET. C	IACKS WERE	TTRIBUTE	TO TEMBLICE STRE	
CORRECTIVE ACTION-CRACK	CORRECTIVE ACTION-CHACKS MAY BE CUT OUT WITH REY HOLE SLOT.					
***************************************			desiring and the second second		PAGE 0200	- 3

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

N T T T T T T T T T T T T T T T T T T T	TEST/REPORT MUSICE DIF DAYA SQUECE	DIF DATA SOURCE	WENTER ATTE	1100	VENDOR MAKE	
\$40-175TEM	FAILED COMPONENT NAME	PART NUMBER	듼		>	
AUTOFILOT-SQUARE-A/B PROGRAMMER	A-98-04-3817-F	FAR 27-41001-969	620507 ETR	A OK	60/C 27-41001-969	•9•071
TAILURE MOE-CONTANINATION. ANISTER MAS CONTANINATED BY	ION. A MERCURY VAPOR METER TEST INDICATED THE PRESENCE OF MERCURY WITHIN THE CANISTER. THE	ICATED THE PRESENCE	OF HERCURY WITH	MIN THE	CANISTER. THE C	
CORRECTIVE ACTION-NOME.	HO HERCURY HAS FOUND IN THE CANISTER.	Š				
AUTOPILOT-SQUARE-A/B PROGRAMER	A-99-04-3194F CIRCUIT BOARD-3MITCH	FAR 27-41443-805	620425 SAN 0	SAN DIEG NO O NO S16		•
FAILURE MODE-FAIL DURING OFF BRATION. FAILURE ANALYSIS DII NAT THE REPORTED FAILURE MAS	FAILURE MODE-FAIL DURING OPERATION-SWITCH 7 OF LOW POWER & CIRCUIT BOARD BECAME INDPERATIVE AFTER 318 SECONDS OF VI Bration. Failure analysis did not compirm the Failure. It has concluded that there has no failure in this part and t hat the reported failure has probably due to a malfunction of some associated circuitry not submitted for analysis.	CIRCUIT BOARD BECAN MS CONCLUDED THAT TH OF SOME ASSOCIATED (E INOPERATIVE , ERE WAS NO FAII IRCUITRY NOT S	AFTER SELURE IN UBMITTED	B SECONDS OF VI THIS PART AND T FOR AMALYSIS.	
CCRRECTIVE ACTION-FACTO THE CIRCUITRY ASSOCIATE	CCRRECTIVE ACTION-FACTORY AND PRODUCTION VIBRATION PERSONNEL MAVE BEEN REQUESTED TO SUBMIT FOR FAILURE ANALYSIS ALL THE CIRCUITRY ASSOCIATED WITH A PARTICULAR FAILURE.	EL MAVE BEEN REQUEST	ED TO SUBMIT F	OR FAILU	RE AMLYSIS ALL	
AUTOFILOT-SQUARE-A/B	AE62-0447/P2-401-00-133	P.184T	1330 ETR GE0423 294	7E8	YES 60/C	996176
FAILURE MODE-PREMATURE OPERATION. TWO OF IATE SEPARATION SEQUENCE, PRECEDED THE GUIS A ANOMALY WAS NOT SPECIFICALLY DETERMINED.	FAILURE MODE-PREMATURE OPERATION. TWO OF THE AUTOPILOT PROGRAMMER GENERATED BACKUP SIGNALS, VERNIER CUTOFF AND INIT IATE SEPARATION SEQUENCE, PRECEDED THE GUIDANCE DISCRETE COMMANDS BY D.7 AND 2.0 SECONDS RESPECTIVELY. CAUSE FOR THI S ANCHALY WAS NOT SPECIFICALLY DETERNINED.	GRAMER GENERATED BU	ICKUP SIGNALS, O BECONDS RESP	VERNIER Ectively	CUTOFF AND INIT	
SYSTEM EFFECT-OFERATION STARTS TOO EARLY.	STARTS TOO EARLY.					
VEHICLE EFFECT-NONE.						
CORRECTIVE ACTION-NOME.			:			
AUTOFILOT - SQUARE - A/B PROGRAMMER	A-99-04-3190F Circuit Boardpin	FAR 27-41635-5	620420 SAN	SAN DIEG YES O NO	·	
FAILURE MODE-FAIL TO CPERA CARD FAILED TO RESPOND TO A TO POOR CONNECTOR NATING BE	FAILURE MODE-FAIL TO CPERATE AT THE PRESCRIBED TIME-DURING MANUFACTURING TESTS, SWITCH 15 OF MIGH POMER E CIRCUIT B CARD FAILED TO RESPOND TO A 25 MILLISECOND INPUT PULSE. THE REPORTED PAILURE WAS NOT CONFIRMED BUT WAS PROBABLY DUE TO POOR COMMECTOR MATING BECAUSE OF DISTORTED COMMECTOR PINS.	HANUFACTURING TESTS, SWITCH IS OF MIGH. REPORTED PAILURE WAS NOT CONFIRMED BUT	1, SWITCH 15 OF	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	POWER Z CIRCUIT B NAS PROBABLY DUE	
CORRECTIVE ACTION-PACTO	CORRECTIVE ACTION-FACTORY PERSONNEL WERE ADVISED OF THE RESULTS OF THE ANALYSIS AND WERE CAUTIONED TO EXERCISE MORE	SULTS OF THE AMALYS	IS AND WERE CAL	TIONED	O EXERCISE MORE	
					PAGE DED1	

GENERAL DYNAHICE CONVAIR DIVISION

18 /W 1846	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥	and the second s	_
 STATES SCD-STRTES	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	PRE VENDOR NAME OTH VENDOR PART NO	······································
 CARE IN THE HAMDLING OF P	PRINTED CIRCUIT BOARDS.				1,0940
AUTOFILOT-SQUARE-A/B	A-89-D4-3188F CIRCUIT B-ARD-TRAUSISTOR	FAR E7-4159E-803	APDAID SAN DIEG YES GD/C	YES 60/C	
FAILURE MODE-SHORT TELECT), DURING TES AUSED AY A PARTIALLY SHORT-CIRCUITED CO USED DURING TESTING OR TROMBLESHODTING.	FAILURE MODE-SHORT TELECT), DURING TESTS THE STAGINS SIGNAL WAS ALWAYS PRESENT. THE FAILURE WAS COMFIRMED AND WAS C AUSED AY A PARTIALLY SHORT-CIRCUITED COLLECTOR TO BASE JUNCTION OF TRANSISTOR 6-9. THE SHORT-CIRCUIT WAS PROBABLY CA USED DURING TESTING OR TROUBLESHOOTING.	HAS ALMAYS PRESENT ION OF TRANSISTOR &	, THE FAILURE WAS C	CHFIRMED AND MAS C IT MAS PROBABLY CA	
CORRECTIVE ACTION-RAR WRI TRONICS MANUFACTURING PERS D IN TEST.	CORRECTIVE ACTION-BAR WRITTEN REQUESTING TZGNTER ADMERENCE TO APPROVED TESTING AND TROUBLESHOOTING PROCEDURES. ELEC TRONICS MANUFACTURING PERSONMEL MERE SMSTRUCTED TO GUBMIT FOR RENORK DISPOSITION ALL COMPONENTS INADVERTENTLY DAMAGE D IN TEST.	TO APPROVED TESTING R RENORK DISPOSITION	AND TROUBLESHOOTIN N ALL COMPONENTS IN	K PRCCEDURES. ELEC ADVERTENTLY DAMALE	
AUTOFILOT-SQUARE-A/B PROCASSER	A-A8-04-08147	FAR 27-43901-3	73F FACTORY 620409	YES 60/C NO	•0.730
FAILURE NODE-FAIL TO OPE CHANGE FROM HIGH TO LOM. P	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME, DURING FINAL FACTORY AUTOPILOT CHECKS THE ROLL EXCITATION DID MOT CHANGE FROM HIGH TC LOW, FAILURE AMALYSIS DID MOT CONFIRM THIS FAILURE, MOST LIKELY A TEST EQUIPMENT OR MUMAN ERROR	DURING FINAL FACTORY AUTOPILOT CHECKS THE ROLL EXCITATION DID NOT CONFIRM THIS FAILURE, MOST LIKELY A TEST EQUIPMENT ON HUMAN ERROR	T CHECKS THE POLL E RELY A TEST EQUIPME	XCITATION DID NOT HI ON MUNAN ERROR.	
CORRECTIVE ACTION-NUME.	PERSONNEL IN FINAL CHECKOUT AREA MOTIFIED OF AMALYSIS RESULTS.	TIFIED OF AMALYSIS	RESUL 18.		
AUTOPILOT-SQUARE-A/B	HG-88-04-3144P	FAR 27-41002-897	SED40S ETR	9/9 94	***
FAILURE MODE-OUT OF TOLERANCE, DURING CHECKOUT 6 MODE, RESULTS MERE 2.5 PERCENT BELOM MONTHAL. OBTAINED IN ALL CHAPMELS, YAW, ROLL AND PITCH. BLE TOLERANCE, YARIATIONS IN TEST EQUIPMENT AGIN	FAILURE MODE-OUT OF TOLERANCE. BURING CHECKOUT IN THE GYRO LAB THE PITCH PROGRAM WAS OUT OF TOLERANCE IN THE SLAVIN 6 MODE. RESULTS WERE 2.5 PERCENT BELOM NOMINAL. THE ALLOMABLE TOLERANCE IS PLUS OR NINUS 2 PERCENT. LOW READING MERE OBTAINED IN ALL CHAMELS, TAM, ROLL AND PITCH. THE ORIGINAL FACTORY CALIBRATION WAS SET CLOSE TO THE EDGE OF ALLOMA BLE TOLERANCE. VARIATIONS IN TERT EQUIPMENT AGING AND LINE VOLTAGES COULD CAUSE THE FAILURE.	IN THE GYRO LAB THE PITCH PROGRAM WAS OUT OF TOLERANCE IN THE SLAVIN THE ALLOMABLE TOLERANCE IS PLUS OR NINUS 2 PERCENT. LOW READING MERE THE ORIGINAL FACTORY CALIBRATION WAS SET CLOSE TO THE EDGE OF ALLOMA AND LINE WOLTAGES COULD CAUSE THE FAILURE.	AN MAS OUT OF TOLES OR NINUS 2 PERCENT N MAS SET CLOSE TO THE FAILURE.	ANCE IN THE SLAVING. LEDGE OF ALLOWS	
CORRECTIVE ACTION- ETR PI 400 (PE IMPUT, RELIABILITY 146E REGULATION BETTER BUT	CORRECTIVE ACTION- ETR PERSONNEL MERE MOTIFIED OF MECESSITY FOR PROPER HARM-UP TIME AND FOR CLOSE CONTROL OF 113 V 400 CPS IMPUT, RELIABILITY REGUESTED A REVIEW OF TEST SET INCOMPATIBILITIES, TEST SET MODIFICATIONS FOR IMPROVED VOL TAGE REGUEATION BETTER SURVEILLANCE DURING CALIBRATION, ETC. AESISTANCE CHANGES TO IMPROVE CALIBRATION PER CIC 18838	FOR PROPER WARN-UP KOMPATIBILITIES, TE AEBIBTANCE CHANGES	TIME AND FOR CLOSE BI SET MODIFICATION TO IMPROVE CALIBRA	CONTROL OF 115 V IS FOR IMPROVED VOL.	
AUTOFILOT-BOUARE-A/B PROGRAMMER	A-99-04-3160-F CIRCULT BOARD-DIODE	FAR 27-41435-3	SED404 SAN DIEG	SAN DIEG YES 60/C	

PASE ORDE

PAILUNE MODE-OPEN IELECT) THE P-1 SIMARY OF THE SUBJECT PRINTED CIRCUIT BOARD COULD NOT BE RESET BY THE R 114) RESE T PULSE, THE FAILUNE MAS CONFIRMED. THE PAILURE MAS DUE TO AN OPEN-CIRCUITED 1MAST DIODE CR-3, THE CAUSE OF THE DIOD

GENERAL DYNAMICS CONVAIR DIVISION

11 JUN 1886	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORME	DPILOT SYSTEM-AIRBOR	¥				
 BYBYEH BUG-BYBYEH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE SITE DATE DIF	417C	1 % 0 %	VENDOR PART NO	
 E FAILURE COULD NOT BE DE	BE DETERMINED AS THE DIODE WAS DESTROYED DURING DEPOTTING OFERATIONS	DURING DEPOTTING O	FERATIONS.				V. 200.24
 CORRECTIVE ACTION-UNKNOWN	A. Salatai esta esta esta esta esta esta esta esta						*10444
 AUTOPILOT-SQUARE-A/B	A-SH-04-UEDE-F CIRCUIT BOARD TRANSISTOR	WAR 84-40904-4	4 20330 M		9		
 FAILURE MODE-CONTANIMATE DROPPED OMAY TO 23 VOLTS OMM ORIGIN MAS FOUND	FAILURE MODE-CONTAMINATION, DURING MAPCHE CHECKOUT, A NO-60 WAS RECEIVED ON THE ROLL PROGRAM ENABLE. TIME SLOT DROPPED ONLY TO 23 WOLTS INSTEAD OF 16 WOLTS DUE TO A TEMPERATURE SENSITIVE 8-4 TRANSISTOR, A CONTAMINATION OF MAN ORIGIN MAS FOUND	WAS RECEIVED ON TH RATURE BENSITIVE G-	E ROLL PROGR	AN ENAB	T. AMIN	INE SLOT TOGA MATION OF UNKN	
 CORRECTIVE ACTION-VENDOR HA	VENDOR HAS CHANGED STYLE OF CONSTRUCTION TO A NEW SECNETRICAL CONFIGURATION. 60/CONVAIR PURCHASE NEW TYPE OF CONSTRUCTION.	TO A NEW SECNETRICA	. CONTIGURAT	<u>3</u>	W)	AIR PURCHASE	•
AUTOFILOT-SQUARE-A/B	97-88-04-4179-7	FAR E7-41001-973	CEDSET ETR		¥E\$	5/09	
FAILURE MODE-PREMATURE O COULD NOT BE DUPLICATED PORTED FAILURE MAS PROBAB	FAILURE HODE-PREMATURE OPERATION. THE PROGRAMMER WAS OBSERVED TO RESET AFTER 10.6 SECONDS OF OPERATION. THE FAILURE COALD NOT BE DUPLICATED ON THE BOOSTER OR IN THE ETR GYRO LAB. FAILURE ANALYSIS DID NOT CONFIRM THE FAILURE. THE RE ORTED FAILURE MAS PROBABLY DAE TO HUMAN ERROR.	MED TO RESET AFTER 1 AB. FAILURE ANALYSI	D.6 3ECONDS	OF OPER.	¥ 10	I. THE FAILURE ILUME. THE RE	
SYSTEM EFFECT-WONE,							
WENICLE EFFECT-NONE.							
CORRECTIVE ACTION-ETR PE MAS CONCURRED IN BY ETR	CORRECTIVE ACTION-ETR PERSONMEL WENE ADVISED OF THE RESULTS OF THE FAILURE ANALYSIS. THE FOSSIBILITY OF HUMAN ERROR WAS CONCURRED IN BY ETR PERSONMEL THOUGH NO CONCLUSIVE PROOF COULD BE OSTAINED. NO FURTHER CORRECTIVE ACTION TAKEN.	S OF THE FAILURE AND OF COULD BE OBTAINED	LYSIS. THE P. NO FURYHER	CORREC	7	F HUMAN ERROR ACTION TAKEN.	
AUTOFILOT-MAUME-A/B PROGRAMMER	A-69-04-3132-F CIRCUIT BOARG	FAR 27-41440-911	**************************************	SAK BIES NO	22		:
 FAILURE MODE-ERRATIC OFE O CONTINOUS HIGH ROLL 67R	FAILURE MODE-ERRATIC OPERATION. THE K-2 RELAY ON THE CIRCUIT BOARD REPORTEDLY EXHIBITED ERRATIC OPERATION LEADING T) contingus high roll faro excitation output until reset. Testing shoked the circuit board to be 6000.	IT BOARD REPORTEDLY LETING SHOKED THE CI	EXHIBITED EN	70 PE 6	8 6	TON LEADING T	
CORRECTIVE ACTION-MOME, FAILURE NOT CONFIRMED.	PAILUME NOT CONFIRMED.				1		
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GENEARL DYNAHICS CONVAIR DIVISION

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		DIFFICULTING REVIEW-ACTORICOT SYSTEMS AND SECOND	VILOT SYSTEM-AIRBO	7 ×				,
	SYSTEM SUD-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	817E TINE DIF	1 0 2 7	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOPILOT- PROGRAMMER	AUTOPILOT-SAUARE-A/B PROGRAMMER	AASE-DDAS/PG-ACO-DS-F1 SWITCH-UMLATCH NOSE PAIRING	COMPOSITE-J PACT	1040 6£0388	36.A	₹ ₹		****
FAILUS IHULTAI CROSS (RE MODE-PRENATURE (MCOUSLY AT THE JETY COMPLING IN THE MAI R UNIT SMETCH FOR N	FAILURE, MODE-PREHATURE OPERATION, AT INSULATION PANEL JETTIBON THE PANEL SQUIBS AND THE MOSE FAIRING SQUIBS FIRED S IMULTAMICOUSLY AT THE JETTISCH INSULATION PANEL SIGNAL. THE INADVERTANT FIRING OF THE MOSE FAIRING SQUIBS WAS DUE TO CROSS COUPLING IN THE MARKESS AND/OR THE SQUIB DETOMATOR CAUSING THE BILICOM CONTROL RECTIFIER DIODE IN THE SQUIB DE TOMATOR UNIT SMITCH FOR UMLATCH MOSE FAIRING TO PIRE.	SON THE PAMEL SQUII MADVERTANT FIRING (JSING THE SILICON OF	38 AND THE OF THE NOSE ONTROL RECT	NOSE FAIL FAIRING	34 400	SAUIDS FIRED S SE MAS DUE TO N THE SAUIS DE	
878TE	STSTEM EFFECT-IMPROPER DISCRETE SIGNALS.	DISCRETE SIGNALS.						
WEHICE	LE EFFECT-COMPOSTR	VEHICLE EFFECT-COMPOSITE ABORTED AND RESCHEDULE.						
CORREC	CTIVE ACTION-RZDES	CORRECTIVE ACTION-REDESIGN THE SYSTEM. REPLACE SCR DICDES WITH RELAYS.	ATH RELAYS.					
AUTOPILOT-	AUTOPILOT-SQUARE-A/B PROGRAMMER	A-99-04-3137F TRANSISTOR ENGST	FAR 27-45201-61	225 03 3	FACTORY	20		***************************************
FAILU TURE .	FAILURE MODE-ELECTRICAL ILURE WAS CONTRHED. THE GC (EMAST) WAS PARTIALLY NO.	OPEN. THE SUBJECT CIRCUIT BOARD FAILED TO PASS E.O.P. STABLE STATE OUTPUT OF THE A MONOSTABLE MALTIVIBRATOR SHORTED, EMITTER TO GROUND, THE FAILURE WAS CAUSED BY	ILED TO PASS E.O.P. TABLE HALTIVIBRATOR ILURE WAS CAUSED BY		1 TOP CAN	DE CONTRACTOR OF	330.460 IN TOP CANISTER TESTS. THE FA MAR S WOLTS ABOVE NORML. TRANSISTOR ACCIDENTAL SHORTING OF P/N ED TO GROU	
COSRE 7 AND	CTIVE ACTION-FACTO	CORECTIVE ACTION-FACTORY PERSONNEL MAVE BEEN INFORMED OF THE RESULTS OF THIS AMALYSIS. CLOSER CONTROL OVER ASSEMBLE I MAD TESTING PROCEDURES WILL BE INSTITUTED.	HE RESULTS OF THIS	AMALY 818.	CLOSER C	ZK TRO	L OVER ASSEMBL	
AUTOFILOT- PROGRAMES	AUTOFILOT-SQUARE-A/R PROCRAINER	A-99-04-3136F CIRCUIT BOARD/RELAY	FAR 27-40117-1	616029	FACTORY	2 Q	YES UNION SAITCH A HO NO SIGNAL CO	*11314
FAILU THE RI	RE MODE-ELECTRICAL EPORTED FAILURE WA DE 18 BELIEVED TO I	FAILURE MODE-ELECTRICAL OPEN. THE K-1 BAFE 28 WOLT RELAY ON THE CIRCUIT BOARD MOULD STICK OPEN CIRCUITED WHEN WARM. THE REPORTED FAILURE WAS COMFIRMED AND FOUND TO BE DUE TO EXCESSIVE AXIAL MOMENENT OF THE ROTOR OF THE K-1 RELAY. F HE CAUSE IS BELIEVED TO BE DUE TO POOR ASSEMBLY AND INSPECTION TECHNISUES OF THE WENDOR.	RELAY ON THE CIRCUIT BOARD WOULD STICK DUE TO EXCESSIVE AXIAL MOVENENT OF THE INDMECTION TECHNIQUES OF THE VENDOR.	WOULD STICE EMENT OF THE ME WENDOR.	R ROTOR	TO TO	OPEN CIRCUITED WIEN WARM. ROTOR OF THE K-1 RELAY. T	
COMPE	CORRECTIVE ACTION-NOME.							
************	autofilot-Bauare-1/8 Programmer	A-88-04-3203-F CIRCUIT BOARD TRANSISTOR	FAR R7-41468-5	4E0314	PACTORY	÷ 9		
PATLUME RESET.		MODE-OUT OF TOLERANCE. BURING MANUFACTURING TERTING THE ZERO SIDE OF THE SE SECOND BIMARY (TED) WAS HIGH AT LADY SHOULD BE 18V). CAUSE MAS A SHORT CIRCUITED BA TRANSISTOR THAT WAS PROBABLY OVERLOADED BURING TESTING O	THE ZENO BIDE OF TRANSLATOR THAT WE	THE SE SECC	ME BINAR	50	O) WES HIGH AT RING TESTING O	
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SEMERAL DYNAMICS CONYAIR DIVISION

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****	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TOPILOT SYSTEM-AIRBOR	**	ſ
BYBYEX BLB-BYBYEX	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE.	VEHICLE LITE PRI VENDOR PART NO DATE DIF TIM, DIF OTH VENDOR PART NO	1
CORRECTIVE ACTION-FACTO	ICTORY PERSONNEL YERE CAUTIONED TO STRICTLY OBSERVE APPROVED TESTING AND TROUBLE SHOOTING.	ICTLY CASERVE APPROVE	D TERTING AND TROUBLE SHOOTING.	****
AUTCPILOT-SQUARE-A/B	A-90-04-31R4F	FAR 27-41440-811	SEDSIE FACTORY TES 60/C	
FAILURE MODE-FAILED TO AILURE.	OFERATE AT PRESCRIBED TIME, ROLL 6	FRO EXCITATION WOULD	TO CHERATE AT PRESCRIBED TIME, ROLL GYRO EXCITATION WOULD NOT OCCUR. AMLYSIS DID NOT CONFIRM F	
CORRECTIVE ACTION-60/C	CORRECTIVE ACTION-60/C PERSONNEL MERE MOTIFIED TO USE CYRRECT PROCEDURF.	RECT PROCEDURF.		
autopilot- square-a/B Programmer	A-29-04-3284-F Trans1810r	7A.7 74-41655-5	620309 FACTORY YES 60/C	766547
FAILURE MODE-ERRATIC OF AILURE MAS CAUSED BY TEI	OFERATION-SMITCH 18 FIRED INTERMITTENTLY TEMPERATURE BEHBLIVITY OF TRANSLATOR 42.	HTLY AFTER WARM UP AND DURING PERFO Ge. Transistor was mestram emizize.	INTERMITTENTLY AFTER MARM UF AND DURING PERFORMANCE OF EOP 330.439 F Transistor &C. Transistor was mestram emicise.	
CORRECTIVE ACTION-MESTI	ESTRAN REMOVED FROM APPROVED VENDOR LIBT FOR EMLESE.	ST FOR EMIESE.		
AUTOPILOT-SQUARE-2/B	A-99-04-3127-F CIRCUIT BOARD TRANSIBTOR	FAR 27-41538-3	GEDSOY FACTORY TES WESTRAM NO.	****
FAILURE MODE-FAILED DU -3 (PHIE32) MANUFACTURED (710M PRACTICALLY BECAME	FAILURE MODE-FAILED DURING OPCRATION, SMITCH 3 HAD INCORRECT OUTPUT W -3 (PAIZEZE)MANUFACTURED BY MESTRAN, OUTPUT OF SMITCH 3 MOULD HOT GO ABO TION PRACTICALLY BECAME A SHORT CIRCUIT WHEN THE TRANISTOR WAS HEATED.	ECT OUTPUT VOLTAGE, P D HOT GO ASOVE GROUND MAS HEATED.	FAILUDE MODE-FAILED DURING OPCRATION, SMITCH 3 HAD INCORRECT OUTPUT VOLTAGE, FAILURE WAS ATTRIBUTED TO TRANSISTOR 6 -3 CEMIZEZE) MANUFACTURED SY MESTRAN, OUTPUT OF SMITCH 3 MOULD HOT GO ABOYE GROIND LEYEL. THE EHITTER TO COLLECTOR JUNC TION PRACTICALLY BECAME A SHORT CIRCUIT MHEN THE TRANSSTOR MAS HEATED.	4 11
CORRECTIVE ACTION-VENDA	DADOR WAS HOTIFIED. FUTURE TRANSISTORS	OF THIS TYPE WILL BE	FUTURE TRANSISTORS OF THIS TYPE WILL SE PROCURED FROM MUCHES.	
AUTOFILOT-SQUARE-A/B	A-99-04-3122F CIRCUIT BOARD BMITCH	FAR 27-41638-8	GEDEET FACTORY NO 60/C	0.7740
FAILURE MODE-PREMATURE UITRY MAS FOLMO, PAILURE	FAILURE MODE-PREMATURE OPERATION. BULTCH 37 FIRED PREMATURELY IN TOP PACKAGE TI Ustry has found. Pailure has attributed to test ret malfunction on Human Error.	tely in top package t tion on mann error.	FAILURE HODE-PREMATURE OPERATION. BATTCH 17 FIRED PREMATURELY IN TOP PACKAGE TEST. NO MALFUNCTION OF BAITCH 17 CIRC ITRY WAS FOUND. FAILURE WAS ATTRIBUTED TO TEST RET MALFUNCTION ON HUMAN ERROR.	
CORRECTIVE ACTION-NOME.	•			
			1040 374d	
era e jadra seriejskegaliza própostve - rova estálen közennyősépe — 4, vegészépenyősépe	and the same of th		NA 1967.	3

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DIFFICULTIES REVIEW-AUTOFILOT STRIEM-AIRBORNE

	TRET/REPORT NUMBER	מואים אואים אום	210 211	1		OTH VENOCE PART NO	
848-878 FE	FAILED COMPOSENT NAME	FANT RUMBER	מא וני מוי				,
AUTOFILOT-SAUARE-A/B PROGRAMMER	AA&\$-0040/P6-4CO-01-P1	COMPOSITE-3 FACT 83-40005-888	1040	٧ پ	÷ 8	7E8 6D/C	•
FAILURE HODE-ERRATIC OF TO OTF. CAUSE UNKNOWN.	OPCRATION. THE FIRE THRUSTER BOTTLES INDICATION WAS CREENTED ON EA DATA WHEN AC PONER WAS TURN	INDICATION WAS CASE	14ED OH E.	DATA WE	EN AC	POACE NAS TURN	
BYBIEM CFFECT-INFROMEN DISCRETE BIGNALS.	DISCRETE BIGGALS.						
WENTELE EFFECT-HOME.							
CORRECTIVE ACTION-INVES	CORRECTIVE ACTION-INVESTIGATE. (FAR-CT-58-04-021)						
AUTOPILOT-SAUARE-A/B PROGRAMMER	SP-80-04-3133F CIRCUIT BOARD	FAR	1120	Ę	ភ្ជំ ទី		10011
FAILURE MODE-SHORT (ELE INARY ASSEMBLY MODULE, P	ICLECTRICAL). THE PROGRAMMEN FAILED TO RUM. FAILURE WAS CAUMED BY A SHORT CIRCUIT IN THE CPG-4 & E, P/M 27-41498-1 ON THE AIAI CIRCUIT BOARD.	PUM. FAILURE WAS CA! BOARD.	MACD BY A	SHORT CII	FCUI T	IN THE CPG-4 B	
CORRECTIVE ACTION-REQUESTED QUALI	CORRECTIVE ACTION-RESUESTED SUALITY CONTROL TO INSUME CLEANLINENS OF POTTIMS MATERIALS AND THE POTTIMS AREA AND TO MARGAE HODILE INSPECTION NETHODS.	AHLINENS OF POTTING	W TERIALS	AND THE	1110	NG AREA AND TO	
AUTOPILOT-SQUARE-A/B	38-90-64-3119-F RECTIFIER-9417CH	FAR 27-41001-979	CEDE 13	£	ž õ		***
FAILURE MODE-ERRATIC OF UTED TO A SILICON CONTRO	FAILURE MODE-ERRATIC OPERATION, SMITCH 16 OF PROGRAMMEN FAILED INTERNITTENTLY DURING A LCOP TEST-FAILURE MAS ATTRIS UTED TO A SILICON COMPOLLED RECTIFIED (EMSS).	A11ED INTERNITTENTLY	DURING A	LCOP TES	I-FA I	LUNE INS ATTRIB	
CORRECTIVE ACTION-VENDOR HOTIFIED OF FAILURE.	M MOTIFIED OF CALLGRE.						-
autopilot-square-a/B Programmer	A062-0013/DA668 01:00£	COMPOST TE-FRD/DPL ET-41001-979	1120	BALC1-E	ğ Ş		
FAILURE MODE-FAIL DURIN	FAILURE MODE-FAIL DURING OPERATION. ISS AND SOT PAULTS WERE INDICATED AT THE LAP DURING THE LOOP TEST.	RE INDICATED AT THE	LAP DURING	1HE C00	20.	•	·
SYSTEM EFFECT-INFROPER	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS. AUTHVILOT DID NOT ACT ON SIGNALS SENT BY THE GUIDANCE SYSTEM.	IT ACT ON BIGHALS BEN	T BY THE 6	UIDANCE	878TE	ż	
WENTELE EFFECT-COMPOSITE DELAYED.	TE DELAYED.						
CORRECTIVE ACTION-AUTOR	corective action-autopilot programmer has replaced. The problem has deternined to be a faulty diode in the probram er. (Far 90-04-3118)	PROBLEM WAS DETERNIN	ED TO BE A	FAULTY	9010	IN THE PROGRAM	
						-	
						PAGE DEDS	-

GENERAL DYNAMICS CONVEIR DIVISION

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HE-8E-04-3081-F FAR HE-8E-04-3081-F F TOLERANCE, ROLL GIND ENCITATION VOLTAGE OUT OF TOLERANCE AT PLUSAMINA U.S. VOLTS. FAILURE NOT VERIFIED IN PROGRAMMER. DIS TRANSISTOR A-89-04-3184F TRANSISTOR A-89-04-308-F A-89-04-308-F A-89-04-308-F A-89-04-308-F A-89-04-308-F A-89-04-308-F A-89-04-308-F B-7-65-01-81 A-89-04-308-F A-89-04-308-F B-7-65-01-81 A-89-04-308-F B-7-65-01-81 A-89-04-308-F B-7-65-01-81 A-89-04-308-F B-7-65-01-81	3131EH	REPUT TROPIES	DIF DATA BOURCE	VEHICLE SITE	DIFOTH	OLTE DIP TIME DIP OTH VENDOR PART NO	
NOTION WE WELL GING EXCITATION VOLING OUT OF TOLERANCE AT \$1.59 VOLTS. PRECIPIED VALIDE FOR EVALUATIONS OF TOLERANCE. BIGGENACE CONCLUDED TO BE IN SITE GIN ALLEVALUAND U.S. VOLTS. FALLOCON U.S. CORNECT PROCEDURE.	-10 UA - 17 TEM	ME-88-04-3081-F	FAR	1090 678	€ €		034740
A-89-04-31E4F A-89-04-31E4F TARASISTON TRANSISTON TRANSISTON TRANSISTON TO COMING CREATION-BATTON E OF LOACH POACH SANTON CINCUIT SOAND FAILER DURING A PACKAGE LEVEL VIS MA-3 ATTRIBUTED TO A TRANSISTON 8-10 CHRIESE) MANFACTURED BY LESTRAN TRANSISTON COMPANY. WOOCH WAS NOTIFIED. FUTURE TRANSISTONS OF THIS TYPE WILL SE PROCURED FROM HUGHEE. A-89-04-3080-F A-89	FAILURE HODE-OUT OF TO 11CH 11 HJ -1 84.8 PLUB O LAB TEST BET.	LERANCE. ROLL GYRO EXCITATION VOLTAI	E OUT OF TOLERANCE	AT 95.29 VOLTS.	APECIFI LUDED TO	ED VALUE FOR SW BE IN BITE 678	
THAMBLEON THE THAMBLEON THAMBLEON THE THAMBLEON THA	11VE ACTION-NEW	PROGRAMER CHECKOUT UNIT INBTALLED	IND VALIDATED AT ETR			·	
DOUBLING CHERATION-SMITCH & CP. LOWER POWER SMITCH CIRCUIT BOARD FAILET DURING A PACKAGE LEVEL VIB MAY ATRIBUTED TO A TRANSISTOR 8-10 CHIESE) MANFACTURED BY MESTRAN TRANSISTOR COMPANY. WOODE MAS MOTIFIED. FUTURE TRANSISTORS OF THIS TYPE WILL BE PROCURED FROM HUGHES. A-89-04-3080-F FFA FAR 6-2015 FACTORY YES BLOCE THE OPERATION-PROCRAMMER RESET AT 18 SECONDS (SHOULD HOT MANE RESET). EXTENSIVE TESTS FAILED TO DIODE CRIDI ON AdTON 11 MAD A LODGE LEAD AND CAPACITOR C1 WAS HOT RESTRAINED BY CONFORMAL COATI D LEAD. A-80-04-3150-F FAR AFOLSO PACKAGE LEAD AND CAPACITOR C1 WAS HOT RESTRAINED BY CONFORMAL COATI D DURING OPERATION. SMITCH & ACTUATED WHEN LAUNCH BUTTON WAS RELEASED ON PACKAGE LEVEL TEST SET. 60/C PERSONNEL WERE ADVISED TO USE CORRECT PROCEDURES.	AUTOPILOT-SQUARE-A/B	A-88-04-3124F Transistor	FAR 27-41360-3			MEGTRAR	17.41
WOOCH WAS NOTIFIED. FUTURE TRANSISTORS OF THIS TYPE WILL BE PROCURED FROM HUCHES. A -89-04-5088-F ET-45E01-619 DIOSE RT-45E01-619 DIOSE RT-45E01-619 DIOSE RT-45E01-619 RT-45E01-619 DIOSE RT-45E01-619 RT-45E01-619 DIOSE RT-45E01-619 RT-45E01-619 DIOSE RT-45E01-619	FAILURE MODE-FAILED DU RATION TEST-FAILURE MAG	RING CPERATION-SMITCH E OF LOMER PO. A STRIBUTED TO A TRANSISTOR 8-10 CP.	ER SWITCH CIRCUIT B 11232) MANUFACTURED	DARD FAILER DUR BY WESTRAN TRAN	ING A PA	CKAGE LEVEL VID CHPANY.	
MOT HAVE RESET), EXTENSIVE TESTS FAILED TO OR C1 MAS NOT RESTRAINED BY CONFURNAL COAT! AROIZE FACTORY NO NO ON MAS RELEASED ON PACKAGE LEVEL TEST SET.	CORRECTIVE ACTION-VEND	CR IMS NOTIFIED. FUTURE TRANSISTORS	OF THIS TYPE WILL B	E PROCURED FROM	HUGHES.		
TURE CPERATION-PROGRAMMER RESET AT 18 SECONDS (SMOULD NOT MAVE RESET). EXTENSIVE TESTS FAILED TO DIODE CRISS ON SAGING THAN A LOOSE LEAD AND CAPACITOR CS WAS HOT RESTRAINED BY COMPORMAL COATS DIEGO. A-88-04-31EQ-F BALTICH A-88-04-31EQ-F BALTICH BALTCH BALT	OT-SQUARE-A/B	A-99-04-3088-F D100E	FAR E7-45201-818				12744
A-98-04-31ED-F BY-41443-603 BYITCH BY-41443-603 BY-41443-603 BY-41443-603 BY OF PACTORY NO BY OF BY ONE LEVEL YEST SET. ED DURING OPERATION. SMITCH & ACTUATED WHEN LAUNCH BUTTON WAS RELEASED ON PACKAGE LEVEL YEST SET. ED/C PERSONNEL WERE ADVISED TO USE CORRECT PROCEDURES.	TE HODE-PREMATURE * FAILURE BUT DIO HAD A DAMAKED LE	COERATION-PROGRAMMER RESET AT 18 SE DE CRIDI ON BMITCH 11 HAD A LOOME LA AD.	CCOMDS (SHOULD NOT H LAB AND CAPACITOR CS	AVE RESET). EXT	ENSIVE T	ESTS FAILED TO CONFURMAL COATI	
A-66-04-31ED-F PAR 4ED126 FACTORY NO BUILTON DURING OFFICEASED ON PACKAGE LEVEL TEST SET. 60/C PERSONNEL MERE ADVISED TO USE CORRECT PROCEDURES.	CTIVE ACTION-UMEN						
DURING CPERATION. BASTEN & ACTUATED UNEN LAUNCH BUTTON UNB RELEABED ON PACKAGE LEVEL.	OT-BRUARE-A/B MER	A-98-04-3120-F BAITCH	FAR 27-41445-609				•• 7733
ED/C PERSONNEL MERE ADVISED TO USE CORRECT PROCEDURES.	NE MODE-FAILED BU	MING OPERATION. BATTCH & ACTUATED M	HEN LAUNCH BUTTON VA	NELEABED ON P	ACRAGE L	EVEL TEST BET.	
1020 3984	CTIVE ACTION-60/C	PERSONNEL NERE ADVISED TO USE CORR	ICT PROCEDURES.				
1020 3974							
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DIFFICULTIES REVIEW-AUTOFILOT STRTEM-AIRBORNE

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2 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	TESTAREPORT NUMBER PAILED COMPONENT MANE	DIF DATA BOURCE	VEHICLE BITE	BITE PRI VENDON NAME	·
AUTOFILOT-SQUARE-A/B	A-85-04-3116-F CIRCUIT BOARD 3WITCH	FAR E7-41530-8	420126 FACTORY	AT 460	11111
PAILURE MONE-FAILED D	PAILUKE MOE-FAILED DURING OPERATION, CIRCUIT BOARD BUITCH 4 ACTUATED WHEN LAUNCH BUTTON ON PACKAGE LEVEL TEST SET	H 4 ACTUATED IMEN LI	LUNCH BUTTON ON I	ACHAGE LEVEL TEST SET.	· ·
CORRECTIVE ACTION-FAI	CORRECTIVE ACTION-PAILURE NOT CONFIRMED. 60/C PERBONNEL ADVISED TO USE PROPER TEST EBUIPHENT.	DVISED TO USE PROPE	TEST EQUIPMENT		1
AUTOFILOT-SALARE-A/B PROGRAMER	CT-99-04-0181' LOGIC & CIRCUIT BOARD	FAR 55-41034-5	GEDIES FACTORY	MY YES 60/C NO	*****
FAILURE MODE-OUT OF T	TOLERANCE, UNIT REJECTED WHEN THE LONER EDGE OF THE MONO SQUARE MANE WAS MEASURED AT 18 V. DC-Y.DC.	EN EDGE OF THE HOND	SQUARE LAVE LAS	MEASURED AT 18 V. DC-	
CORRECTIVE ACTION-NOME.	WE. FAILURE NOT CONTINED.				
AUTOFILOT - SQUARE - A/B PROSRAIMER	A-99-04-3090-1* CIRCHIT BOARD DIODE	FAR 27-41442-5	SECTION PACTORY	MY YES 60/C NO	27.4
FAILURE MODE-ERMATIC	FAILUME MODE-ERHATIC OFFRATION-SWITCH 10. E MAS INTERNITTENT. TESTIMS CONFIRMED FAILUME AND MEVEALED A COLD BOLDEN JOINT FROM THE ANCHE SIDE OF DICCE CPS 10 THE BOARD EYELET.	ENT. TEATING CONTIN	ED PATLUME AND F	EVEALED A COLD BOLDEN	
CORRECTIVE ACTION-FAC	CORRECTIVE ACTION-FACTORY MANUFACTURING AND INSPECTION PROCEDURES REVI'ED TO IMPROVE SOLDERING TECHNIQUES.	OCEDURES REVISED TO	IMPROVE BOLDERIP	6 TECHNIQUES.	
AUTOFILOT-SQUARE-A/B	H6-98-04-3104F	FAR 27-41001-967	820115 ETR	YES 46/C	:
FAILURE MODE-MORT IE	MELEC) INTERMITTENT-SUSPECT COLD SOLDER JOINT.	a JOINT.			·
CORRECTIVE ACTION-6D/ ROBLEM.	CORRECTIVE ACTION-GD/C QUALITY CONTROL ADVISED BY RAR A-99-D4-69 AS A RESULT OF FAR A-98-D4-3090P AND COLD MOLDER Colema	10-04-68 AS A RZSULT	OF FAR A-88-04-	IGBOP AND COLD NOLDER P	
AUTOFILOT-BEUARE-A/B PROGRAMMER	C1-98-04-007F BMI TCH	FAR 38-41001-619	8£0113 AMR	YES 40/C NO	
FAILURE MODE-FAIL TO MORTED TO GROUND, AND	FAILURE MODE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME, UNIT REJECTED FOR BMITCH 22 BEING ON, PINS JA-P AND J3-D & MORTED TO GROUND, AND PING JE-P BURNED.	UNIT REJECTED FOR DE	HITCH EE BEING OF	4, PSH4 34-P AND J8-D &	
				PAGE CIEDS	П

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18 JUN 1966	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	TOFILOT SYSTEM-AIRBOR	¥				
3121EH 318-3131EH	TESTARFORT MUMBER FAILED COMPONENT MANE	DIF DATA SCURCE PART NUMBER	WEHICLE DATE DIF	VEHICLE BITE DATE DIF TIME DIF	# 5 E	VENDOR PART NO	
RECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME. FAILURE MAS NOT CONFIRMED.		Assessment receives a survey.				***************************************
AUTOPILOT - BRIMNE - A/B PROGRAMMER	A-19-04-3104F SMITCH	FAR 87-45201-015	#1# #20110	FACTORY	ž g		:
FAILUME MODE-FAIL TO OF	FAILUME MODE-FAIL TO OPERATE AT PRESCRIBLD TIME. SMITCH NO. B FAILED TO OPERATE DURING TESTING. CORRECTIVE ACTION-NOME-FAILURE NOT CONFIRMED.	S. B FAILED TO OPERAT	Dus 1946	E873M6.			
AUTOFILOT-SQUARE-A/B PROGRAMEP PAILURE MODE-PREMATURE 7164YION REVEALED LOM PO	ITOPILOT-SQUARE-A/B ARI41-0-3-E1/FC-4CO-03-021 COMPOSITE-FACTORY E1F YES SMITCH-LOM POWER ELECTRONIC 27-43E01-815; TET 4E0109 ND ED01 FAILURE HODE-FREDATURE GPERATION-GUIDANCE ROLL TORRUING ENDED AT 15 SECONDS. EMPECTED END TIME 15 19 SECONDS. INWES	COMPOSITE-FACTORY E7-43201-815, TET EDOI EDOI AT 15 SECONDS. E	E1F GE0108 XPECTED ED	6 12 13 13 13	1 2	ECOMOS. IMMES	0
TEN EFFECT-IMPROMER SCLE EFFECT-COMPONIS RECTIME ACTION-INE P	STRIEN EFFECT-IMPROMER AMALOG SIGMALS, MOLL TORGUING ENDED 4 SECONDS GARLY. Venicle effect-composite rescheduled-composite neram to demonstrate promer system operation. Corrective action-the programmer was rejected (IRPS1370) and replaced.	D 4 SECONDS EARLY. DIOUSTRATE PROPER SYS ND REPLACED.	IEN OPERA	3			
AUTOFILOT-SQUARE-A/B	A-pp-04-3684-F CIRCUIT BOMB	FAR E7-41443-805	\$60103	PACTORY	YES 60/C	9/6	**
FAILURE MODE-ERRATIC OPERA PROBABLE CAUSE OF FAILURE W COMPECTIVE ACTION-UNKNOWN	FAILURE MODE-ERRATIC OPERATION-VIBRATION SENSITIVE BOARD FAILED DURING PROGRAMMER TEST, FAILURE MAS NOT CONFIRMED. WORABLE CAUSE OF FAILURE MAS INSTRUMENTATION KALFUNCTION. CORRECTIVE ACTION-UNKNOWN.	FAILED DURING PROGRAM	25 751.	FAILURE	9 4	I CONTINUED.	
AUTOFILOT-SQUARE-A/B	A-88-04-8112F CIRCUIT BOARD-BAITCH	FAR 87-41443-803	10103	PACTORY	YES 50/C	3/0	

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PAILUME MOCE-PAILED TO OPERATE AT PRESCRIBED TIME BHITCH NO. 10 PAILED TO CHERATE DURING TESTIMS.

CORRECTIVE ACTION-NOT CONFIRMED. POSSIBLE HUMAN ON TEST SET ERROR.

8	·		0	3 ~ m			
VENDOR NAME	ED AN UNBYABL	CENT CREATER	6UIDANCE DEC	ION. AS A RESU RUCT DISABLE (T TO EMEINE RE	G	K41811ED ERRA	PA6E 0210
2 E	1 Q 0		455 455 455 455 455 455 455 455 455 455	DEPLET N DEST	S ON A DOE!	1 0 E	
SITE PRI TIME BIF OTH	ME16.3T 3	9334	1-2 263 34 RESPO	UNTIL LOK DEPLETION. SEPARATION DESTRUCT DEPLETION CUTOFF TO	ETR JAE HOT	ETR.	
VEWICLE DATE DIF	611E8 COMPOSITE	ATING AT	6112E2 H CUTPUT 1	PERATE UNI	38E 411E19 5E OF FAIL	AT ETR THE	
DIF DATA SOURCE PART NUMBER	COMPOSITE-FACTORY E7-45E01-815, TET E001 is NERE EARLY, POST	R COUNTER MAS OPER	E7-41001-961 E7-41001-961 DIS NOT PROVIDE A AL.	SUSTAINER EMEINE CONTINUED TO OPERATE. NA PLANKED ORBIT. ALBO, AGENA PREMIURI ACCOMPLISHED BY EACH-UP AT VECO. ATH AM INDEPENDENT PATH FOR PROPELLANT.	ET-41001-663 ROM SMITCH 16. CAU	FAR E7-41001-863 ATION IN 6YRO LAB FIRMED AT 80. TO HUMAN AND/OR TE	
TESTARFORT NUMBER FAILED COMPONEN' NAME	TOPILOT-SQUARE-A/8 ARI41-0-3-EL/FC-8CO-DE-DEI COMPOSITE-FACTORY ELF YES NO CLOCK-PROGRAMMER 21-45E01-515, TET 811E29 NO CLOCK-PROGRAMMER 21-45E01-515, TET 811E29 NO FAILURE MOS-PREMATURE OPERATION-MANEROUS SWITCHING FUNCTIONS MERE EARLY. POST COMPOSITE TESTING SMOKED AN UNSTABLE PROGRAMMER BINARY GENERATOR.	BYSTEN EFFECT-OPERATION TOO HIGH-THE PROGRAMMER DIGITAL CLOCK COUNTER WAS OPERATING AT A SPEED 20 PERCENT GREATER AN EXPECTE. VEHICLE EFFECT-COMPOSITE RESCHEDULED-COMPOSITE REAAN. CORRECTIVE ACTION-PROGRAMMER IR/D AND REPLACED (FTR \$788).	TOPITOT-SQUARE-A/B AEST-1273/LE-401-00-114 FLIGHT 114D 1-2 YES OGRAPHER PROGRAMMER HIGH POMER BMITCH EG 27-41001-961 611222 263 YES FAILURE MODE-OPENIELECTRIC). PROGRAMMER HIGH POMER SMITCH EG DIS NOT PROVIDE AM OUTPUT IN RESPONSE TO GUIDANCE DECO ER SECO COMMAND, OR 10 THE PROFELLIANT DEPELTION BACK-UP SIGNAL.	VEHICLE EFFECT-LATE SUSTAINER ENGINE SHUTDOM, SUSTAINER ENGINE CONTINUED TO OPERATE UNTIL LOW DEPLETION, AS A RESULL. THE SATELLITE WAS INSERTED INTO A HIGHER THAN PLANED CRBIT, ALBO, AETNA PRENATURE SEPARATION DESTRUCT DISABLE (MONIMALLY ACCOMPLISHED BY A/P SECO OUTPUT), WAS ACCOMPLISHED BY BACK-UP AT WECO. CORRECTIVE ACTION-SLASSESIENT WESTELES REVISED WITH AN INDEPENDENT PATH FOR PROPELLANT DEPLETION CUTOFF TO EMFINE RELAY BOX IN THE EVENT OF PROGRAMMER DISCONTINUITY.	48-04-3029-F MITCH TECH-INTERMITTENT CUTPUT WOLTAGE PI CAUSE OF FAILUME HOT DETERMINED.	FE AT PRESCRIBED TIME-DURING EVALUNG THES. FAILURE COULD NOT BE CONERS ADVISED FAILURE PROBABLY GUE	denializati idalea di displomati interpreta displomatica di professioni denistrato di altre di mandicioni del
*7**C**	AUTOFILOT-SEUARE-A/8 ARI- PROCRAMER CLO FAILURE MODE-PREMATURE OPERA PROCRAMER BINARY GENERATOR.	BYSTEN EFFECT-OFFRATION TOO HIGH-THE PROGRAMMEN HAN ERFECTED. VEHICLE EFFECT-COMPOSITE RESCHEDUATD-COMPOSITE CONFICTIVE ACTION-PROGRAMMEN IR/D AND REPLACED	AUTOFILOT-SQUARE-A/B PROCRAMEER FAILURE MODE-OPENIELECTR DER SEGO COMMAND, OR TO	WENCLE EFFECT-LATE SUST LI, THE SATELLITE WAS INS HOMIMILT ACCOMPLISHED BY CORRECTIVE ACTION-SUBSEC LAY BOX IN THE EVENT OF P	1 1 1	AUTOPILOT-SQUARE-A/S SA PROLANNER S FAILUNE MODE-FAIL TO OPERAL SC RESET AND SMITCH ACTUATION CORRECTIVE ACTION-UNKNOWN,	

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8727EH 848-8787EH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATC DIF TI	BITE PRI	SITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	
AUTOFILO1-SBURRE-A/S PROGRAMMER PROLEMER WODE-FAIL TO OPER ED, THE FLIGHT PROGRAMMER	UTOFILOT-SBURRE-A/8 ARIAI-G-3-21/FC-6CO-G1-G21 COMPOSITE-FACTORY 21F FACTORY YES ROGARMACE BYITCH-LOW POMER 27-45251-615, TET 2101 FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME- PITCH AND YAW INTEGRATOR SAINS DID NOT CHANGE AT STAGING ED, THE FLIGHT PROGRAMMER HIS REJECTED DUE TO A FAILURE OF LOW POMER SWITCH NO. 6 (INTEGRATOR SAIN CHANGE).	COMPOSITE-FACTORY EIF FACTORY EP-45E01-615: TET EU01 YAW INTEGRATOR SAINS DID NOT CHANGE OM POMER BWITCH NO. 6 (INTEGRATOR 64	EIF FA GIIELE DID NOT CH G (INTEGRAT	FACTORY YES NO CHANGE AT ST. ATOR GAIN CH	NO BTAGING AB EXPECT CHANGE).	00
SVATEN EFFECT-INPROPER DESCRETE SIGNAL.	BYBJEH EFFECT-IMPROMER DESCRETE SIGNAL. WEHICLE EFFECT-COMMOSITE RESCHEDULED. COMMOSITE RE-RUM.					
CORRECTLYE ACTION-PROGRAMMER REJECTED AUTOFILOT-SQUARE: A/B AAS1-0217/P6 PROGRAMMER SAITON	44ER MEJECTED. AA41-0E17/P6-4CBM-06-104/C-1 3417CN	COMPOST TE-FRD/DPL	1040 36A	A YES		
FAILURE MODE-ERRATIC OFERA DICATED FOR A BRIEF FERIOD.	FAILURE MODE-ERRATIC OPERATION, PROGRAMMER ZERO INDICATION WAS LOST HAD SEVERAL BATTCH FUNCTION ACTIVATIONS WERE IN ISCATED FOR A BRIEF PERIOD.	NAS LOST AND SEVERAL	. SMITCH PUR	CTION ACT	IVATIONS MERE IN	
WHICLE LFFECT-NOME.	IOTER DISCRETE SIGNAL.					
CORRECTIVE ACTION-RESET	CORRECTIVE ACTION-RESET PROGRAMMER. THE PROBLEM MAS DUPLICATED IN THE 8.D. LAB WITH LOW WOLTAGE BUT SUCH A LOW WOLT GE SITUATION COLLE HUT BE PROVED.	TED IN THE 8.D. LAB	MITH LOW WO	LTAGE BUT	SUCH A LOW YOLT	
AUTOFILOT-SQUARE-A/B PROGRAMER	A-9L-D4-3089-F CIRCUIT BOMD-DIODE	FAR E7-43901-3	611207 LI	LINCOLN YES		
FAILURE MODE-OPEN (ELECT) TO CRACKED DIODE CASE IN TIME SEVERE STRAIN ON DI	(ELECT). DURING CHECKOUT UNIT NOULD NOT L SE IN TRIGGER CIRCUIT OF BAITCH NO. 1. PR ON DIODE GLASS BODY.	NOT LOCK OUT BOOSTER GINBALING SIGNAL, FAILURE CONFIRMED DUE 1. PROBABLE CAUSE UNS IMPROPER 1387ALLATION OF DIODE LEADS PU	Jaling Signa Proper 1287a	L. FAILUR	E CONFIRMED DUE F DICDE LEADS PU	
CORRECTIVE ACTION-FACTOR	CORRECTIVE ACTION-FACTORY PROVIDED WITH MORE ADERUATE TOOLING FOR THE PORMING OF LEADS ON SMALL ELECTRONIC COMPONEN S.	NG FOR THE FORMING	OF LEADS ON	MALL ELE	CTRONIC COUPONEN	
AUTOFILOT- MUARE-A/B PROGRAMMER	A99-04-8038 BMI 7CH	7AR 27-41655-9	611323	¥ 0		8 0 0 0 0 0
FAILURE MODE-FAIL TO OPERATE EXTENSIVE TESTS AND ANALTSIS.	to operate at prescribed time- buitch is reportedly would not reset. Fällure has not compirmed by d amalysis.	REPORTEBLY MOULD MO	I RESET. FÄI	-	NOT CONFIRMED BY	
CORRECTIVE ACTION-LAKNOMN-PAILURE NOT CONFIRMED.	FAILURE NOT CONTERNED.					
	Appensymment of the Control of the C				PA6E 0211	-, ,

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1	8787EN 816-8787EH	TEST/REPORT HUMBER FAILED COMPOMENT HAME	DIF DATA BOURCE PART FUMBER	VEHICLE DATE OIF T	\$17E	E E	VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIP OTH WENDOR PART NO	
152	AUTOFILOT-SBUARE-A'B PROGRAMMER	AEEL-OBBA/PE-404-00-117 BIAGING BACKUP ACCELERATION SWITCH	FLIGHT	1170 12 811118 13	135.5	ğ ç		••532•
• •	AILURE KODE-PREMATURE OFFRENATURE OFFRENATURE	FAILURE KODE-PRENATURE OPERATION. THE 87%-ING BACKUP ACCELERATION SWITCH WAS MOUNTED ON THE SKIN OF THE LOR TANK AN D OPERATED AT 8.2 6 INSTEAD OF 8.77 6 DUE TO THE EXTREME COLD ENVIRONMENT.	ERATION SWITCH WAS ID ENVIRONMENT.	COUNTED ON T	HE SKIN	8	HE LOP TANK AN	
~ 3	LYSTEN LFFECT-IMPROPER INCE STRIEH COMPUTER SE	EYSTEN LFFECT-INFROMER DISCRETE SIGNAL. THE PROGRAMMER RECEIVED A STAGING BACK-UF SIGNAL D.4 SECONDS BEFORE THE GUI Dance system comfuter generated the proper staging discrete due to the premature back-up switch operation.	LIVED A STAGING BACK DUE TO THE PREMATUR	E BACK-UP S	0.4 SEC WITCH O	ONDS PERAT	BEFORE THE GUI ION.	
- 2 5 °	EMICLE EFFECT-PREMATUR THE BOOSTER TO CUTOFF STAIMER CUT-OFF SIGMAL CORRECTIVE ACTION-ACCEL	VEHICLE EFFECT-PREMATURE BOOSTER CUTOFF. THE PROGRAMMER DELIVERED THE STAGING DISCRETE D.4 SECONDS TOO EARLY CAUSIN STAGES TO CUTOFF BEFORE THE WENTER CUT-OFF SIGNAL WAS NOT SENT BY THE GUIDANCE COMPUTER UNTIL PLANNED VELOCITY WAS ACHIEVED. CORRECTIVE ACTION-ACCELERATION SMITCH WAS RELOCATED ON THE SKIN OF THE FUEL TAIN IN A HORE COMPUTELE ENVIRONMENT.	IVERED THE STAGING PROPER VELOCITY. THE ER UNTIL PLANKED VEI SAIN OF THE FUEL TO	DISCRETE D. HISSION MA. OCITY MAB A	4 SECON S SUCCE CHIEVED E COSPA	05 TO 85FUL 718LE	DECAUSE THE B.	
152	AUTOFILOT-SQUARE-A/B	A-96-04-3074-F 947 TCH-RECTIFIER	FAR 27-41001-833	47 611119	ETR	# S	YE& 60/C	
* # *	FAILURE MODE-ERRATIC OF ILURE WAS DUE TO A FAULT B THE SMITCH.	IIC OMERATION-SMITCH 17 HAD INTERMITTENT CUTPUT AND PROGRAMER RESET AT RANDOM TIMES. SMITCH 17 FA FALLIT SILICON CONTROLLED RECTIFIEN. RESET PROBLEM WAS DETERMINED TO BE A RESULT OF NO LOAD ACROS	OUTPUT AND PROCHAMMET PROBLEM WAS DETE	TR REGET AT	RANDON A RESU	25 21 21	1. SMITCH 17 FA	
5 5 2	CORRECTIVE ACTION-LAKNOMA AUTOFILOT-SQUARE-A/B A	AR141-0-3-14/FC-6CO-04-D14	COMPOSITE-FACTORY ET-45E01-415, TET E	145	FACTORY	2 8	YES 40/C NO	***************************************
> ∵ ∓	VAILURE MODE-FAIL DURIN THIS OCCURRED ON MSL #F TIME SATISFACTORY.	DOI JAILURE MODE-FAIL DURING OPERATION-ROLL TORGUIN: STOPPED AT 15 SECONDS WHEN DEACTIVATION IS EXPECTED AT 17 SECONDS. THIS OCCURRED ON MSL SF WITH THE SAME PROGRAMMER INSTALLED. PROGRAMMER WAS RENORKED AND REINSTALLED. SUBSEGUENT TES	DOS T 15 SECONDS WHEN D , PROGRAMMER WAS RE	EACTIVAȚION MORKED AND I	IS EXPE IEINSTAL	86	AT 17 SECONDS. RUBSEQUENT TES	
_	WRIEN EFFECT-OFERATION	STATEM EFFECT-OPERATION STOPS PREMATURELY-PROGRAMMEN STOPPED ROLL PROGRAM & SECONDS TOO SOOM.	ED ROLL PROGRAM & &	ECO403 100				
-	ENICLE EFFECT-COMOSII	WENICLE EFFECT-COMPOSITE RESCHEDULED, REALM OF COMPOSITE :	OMPOBITE MADE AFTER REPAIR OF PROGRAMMER	PROGRAMMER			•	
•	CORRECTIVE ACTION-PROGRAMMER REMORKED.	RAMMER RENORKED.				l		·
5 ¥	autopilot-Beurre-A/B Procraimer	AA81-0189/P1-6CO-01-04 CIRCUIT BOARD	COMPOSITE- J FACT	44 611113	11	ž 2		
-	ATLURE MODE-CRRAYIC OF	FAILURE MOE-ERRATIC OPERATION-SMITCH IT OF THE AZP PROGRAMMER HAD AN OUTPUT WHICH RESEMBLED THE TINING PLUSE WHICH Indicated that plus 28 volt Pomer was assent from the control diode.	HHER HAD AM OUTPUT ROL DIODE.	MAICH RESEN	140 TH	Ī	ING PLUSE WHICH	
					-		PA6E 0212	
1	Charles on the Control of the Contro	STATES OF THE PROPERTY OF THE						

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DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORNE

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VEHICLE BITE PRI VENDOR MANE DATE DIF TINE DIF OTH VENDOR PART NO	4E TINIME PALSE	3/03	٤			YES 60/C NO	DURING TESTING		COMMIND. FAILUR)
# 5 # 5	8		3			T OF	ESTING FEORT	5 5			ğ	M 22
11 % I	CH RESCH	FACTORY	OCCURRED			FACTORY	TENSIVE TI	FACTORY	TESPONSE I		4 0 1 10 11	ATURELY I
VEHICLE DATE DIF	TPUT THIS	147	PUMC TI ONS			91110E	ITIVE. EX!	1090 611C27	E P11.7CR #		1030 611021	WATED PRES
DIF DATA SOURCE PART HUMBER	AP PROGRAMMER HAD AN O	COMPOST TE-FACTORY	E7-45E01-615, TET E001 ND TAHK FRACHENTATION	·		FAR R7-41594-605	TOR WAS VIBRATION SENSITABLE DEVELONED AN ENIT	FAR 27-41001-931	ES FAILED TO CHANGE THE AT 80.		FLIGHT 27-04099-1	CELERATION BMITCH ACTIV R TANK.
TEST/REPORT NUMBER FAILED COMPONENT NAME	BTRIEN EFFECT-IMPROPER ANALOS BIGNALB-BNITCH IT OF THE AP PROGRAMMER HAD AN OUTPUT MHICH RESEMBLED THE TIMING PULSE VENICLE EFFECT-MOME. CORRECTIVE ACTION-THE PROGRAMMER WAS REPLACED.	AR141-0-3-14/FC-6CO-02-014	27-45201-515, TET 2001 CHATURE OPERATION-THE PROGRAMMER RESET AND TANK FRACMENTATION FUNCTIONS OCCURRED EARLY.	SYSTEM EFFECT-IMPROMER DISCRETE SIGNALS. WENICLE EFFECT-COMPOSITE RESCHEDUED. COMPOSITE RE-RUN.	RAMMER REPLACED.	A-98-04-1078-F CIRCUIT BOARD	FAILURE MODE-ERRATIC CPERATION. A MONOSTABLE MALTIVIBRATOR WAS VIBRATION BENSITIVE, EXTENSIVE TESTING DID NOT 130LA TE CAUSE OF FAILURE-BECOMD EMITTER FOLLCHER OF THE MONOSTABLE DEVELOPED AN EMITTER TO COLLECTOR BHORT DURING TESTING. ** CORRECTIVE ACTION-UNKNOWN.	HC-A9-04-3033 9MI TCH	FAILURE MODE-FAIL TO OFERATE AT PRESCRIBED TIME-BUITCH 26 FAILED TO CHANGE THE FILTER RESPONSE UPON COMMIND. FAILUR E was not verified and cause of failure was not 1806/ATED AT 80.	EACH RESPECTIVE PROGRAMER.	are1-0784/LP-408-00-108 britch	PAILUME HODE-PREMATUME OPERATION. THE STAGING BACKUP ACCELERATION SWITCH ACTIVATED PREMATUMELY SECAUSE OF THE LOW T EMPERATUME ENVIRONMENT CAUSED BY 178 PROXIMITY TO THE LOX TANK.
SYSTEM \$UB-\$TEM	STATEN EFFECT-IMPROPER WENICLE EFFECT-NOME. CONNECTIVE ACTION-THE	AUTOFILOT-SQUARE-A/8	FAILURE HODE-PREHATURE	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS. VEHICLE EFFECT-COMPOSITE RESCHEDULED. CO	CORECTIVE ACTION-PROGRAMMER REPLACED.	AUTOFILOT-SAUARE-A/B PROGRAHMER	FAILURE MODE-ERRATIC OFERA TE CAUSE OF FAILURE-MECOND CORRECTIVE ACTION-UNKNOWN.	AUTOPILOT - SQUARE - A/B PROGRAHHER	FAILURE MODE-FAIL TO OF	UT PROCEDURE FOR EACH RE	au topilot-sauare-a/b Programeer	PAILURE HODE-PREMATURE EMPERATURE ENVIRONMENT C

GENERAL BYNAMICS CONVAIR DIVISION

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DIPFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	od vinancillaniae,impropriete mino i françois dendelitroporti adracticiposto por estado adractica estado de la					TIME DIF OTH VENDOR JART HO	
SYSTEM EFFECT-IMPROPER DISCRI EARLY SHITCH ACTIVATION.	ioper discrete sighals. The programmer stabing subroutine was initiated prematurely because. Tation:	SING BUBNOUTINE WAS	INITIATED	PREHATUREL	T BECAUSE O	OF THE	361360
VEHICLE EFFECT-PRENATURE BOOK	HATURE BOOSTER ENGINE CUTOFF, THE STASING SUBROUTINE WAS INITIATED D.936 SECONDS BEFORE THE BURRO. HE DISCRETE WAS GENERATED.	SUBROUTINE WAS INT	71ATED 0.83	\$ \$ECO#0\$	BEFORE THE	0	
CORRECTIVE ACTION-THE ACCELERATION S ND STATION 105E-896 FOR WIR VEHICLES.	CORRECTIVE ACTION-THE ACCELERATION SWITCH WAS RELOCATED ON A FUEL TANK MOUNT AT STATION 1094-916 FOR ETR VEHICLES. D STATION 1032-896 FOR WIR VEHICLES.	A FUEL TANK MOUNT A'	T STATION :	094.916 FO	R ETR WEHIC	LC3 A	
AUTOPILOT-SOURE-A/B AABI	AA81-0132/P2-401-00117	COUNTDOM	1170	32 NO -3080 NO			****
FAILURE MODE-FAIL TO SPERATE	TO SPERATE AT PRESCRIBED TIME, BEPARATION DISCRETE NOT RECEIVED BY AUTOPILOT PROGRAMMER.	DISCRETE NOT RECEI	NED BY AUTO	FILOT PROG	RAIMER.		
SYSTEM EFFECT-INFROPER DISCRETE SIGNAL.	ETE BIGHAL.						
VEHICLE EFFECT-COUNTDOWN ABOR ALAICH WINDOM.	VEHICLE EFFECT-COUNTDOMM ABORTED AND RESCHEDULED. NO MINUTE HOLD WAS INSUFFICIENT TIME TO CORRECT PROBLEM TO MEET L UNCH WINDOM.	HOLD MAS INSUFFICE	DAT 11ME 10	CORRECT	ROBLEN TO P	בנו ר	
CORRECTIVE ACTION-HOME.							
AUTOFILOT-SQUARE-A/B SP (PROGRAMMER SMI)	SP 90-04-3017F SHITCH PROGRAMER AUTOPILOT PROGRAMER CANISTER	FAR 27-41001-835	1100 t	MTR YES	5/09 \$		694931
FAILURE MOE-FAIL TO OPERATE SECONDS AFTER STABING.	TO CHERATE AT PREBCRIBED TIME. VERNIER BIAS ACTIVATION SWITCH ACTIVATED AT STAGING INSTEAD OF ING.	AS ACTIVATION SHITCH	ACTIVATED	AT STACIN	6 INSTEAD	6. *	
CORRECTIVE ACTION-NO CORRECTI	NO CORRECTIVE ACTION BECAUSE A MALFUNCTION COLLD NOT BE FOUND IN THE ITEM. ASSUME MAPCHE ERROR IN	M COULD NOT BE FOUND	IN THE	EN. ASSUM	MAPCHE ESA	20 E	
AUTOFILOT-SQUARE-A/B AES	AE61-1023/FC-6CO-02-036	COMPOSITE-FACTORY 87-45E00-1	411013	FACTORY NO	5/9 5		06440
FAILURE MODE-OUT OF FOLERANCE	FOLERANCE-ALL GYRO AND BERYO INPUT COMMANDS MERE POSITIVE DUE TO FAULTY AGE TEST PROGRAMMER TAP	ANDS NERE POSITIVE (NE TO FAUL	TY AGE TES	T PROGRAMME	A TAP	
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS.	s signals,						
CORRECTIVE ACTION-FAULTY AGE	FAULTY AGE TEST PROGRAMMEN TAPES REPLACED.						
					•		
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GENERAL DYNAMICS CONTAIN DIVISION

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		DIFFICULTIES SEVIEW-A	DIFFICULTIES SEVIEW-AUTOPILOT SYSTEM-AIRBORNE	Į.			-	ſ
·	BYBTEN BLD-SYBTEN	TESTARFORT HUMBER FAILED COMPONENT HANG	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	8176 FINE DIP	0 T T	BITE PRI VENDOR PART NO	Q
	AUTOFILOT-BEUARE-A/B PROSRAMER	A-98-04-4084-7	FAR 87-41001-931	100111	CTA	₽ ₽		***************************************
		IC OPERATION-UNIT RESET ERRATICALLY-PAILURE NOT CONFIRMED-CAUSE OF FAILURE DUE TO FRATED WIRE IN	ILURE NOT CONFIRMED-CA	USE OF FAIL	and awn	õ	AATED WIRE 11	
	CORRECTIVE ACTION-65E	-63E REFAIRED. A-90-04-296-F	FAR 97-43901-1	24E	*5	8 8	5/05	*0*5*0
·	MODE-FAIL E CUTOFF (MED. IT IS	TO CEASE CPERATION AT PRESCRIBED TIME, THE PROGRAMMER WAS REPORTEDLY GENERATING A CONTINUOUS VERN (VECO) SIGNAL AT ZERO TIME, THIS SIGNAL CAUSED THE ANTI-FIRE SYSTEM TO OPERATE. FAILURE COULD NOT SCONCLUDED THAT THE FAILURE AS REPORTED WAS EXTERNALLY INDUCED.	THE PROGRAMMER WAS RECAUSED THE ANTI-FIRE WAS EXTERMALLY INDUC	PORTEDLY GA SYSTEM TO C	NERATIN Perate.		ONTINUOUS VEI	*
	CORRECTIVE ACTION-NO CO	CORRECTIVE ACTION-NO CORRECTIVE ACTION CAN BE TAKEN AS THE REPORTED FAILURE WAS NOT CONFIRMED. THE PROGRAMMER DEVEL OPNENT BROUP IS INVESTIGATING THE RELIABILITY AND PACKAGING PROBLENS OF RELAY XI.	HE REPORTED FAILURE WAS PROBLEMS OF RELAY X	\$ 107 COM	. T	Ä	OGRAHHER DEVI	
	AUTOPILOT-SQUARE-A/B	58-98-04-291-F	FAR E7-41001-837	1170 610927	ETA	£ 0		***************************************
	FAILURE MOE-OUT OF TOLEFANCE, DURING THE WOLTAGE, THE WOLTAGE SHOULD HAVE BEEN (-) IN CIRCUIT DOARD ASAE, P/N EY-41622-807 NM.		PESFORHANCE OF PROCEDURE 27-90338-BKZ, SWITCH 26 PRODUCE THE URONG OUTFU 8 VOLTS BUT IT MAS (PLUS) 12 VOLTS, AMALYSIS REVEALED THAT A JUNNER WIRE 1 HISWIRED TO SWITCH 26 BINARY.	E, SWITCH I	SEALED	A TA A T	E MONG OUTPI	<u> </u>
	CORRECTIVE ACTION-RAR : B TAKEN BY INSPECTION SA AL CORRECTIVE ACTION IS	CORECTIVE ACTION-RAR 98-04-672 WAS INITIATED AND DIRECTED TO GUALITY CONTROL INSPECTION GROUP. CORRECTIVE ACTION I B TAKEN BY INSPECTION SUPERVISION HOLDING MEEKLY MEETINGS WITH FACTORY INSPECTORS TO DISCUSS PROBLEM AREAS. INDIVIDU AL CORRECTIVE ACTION IS TAKEN BY ISSUING AND 8 TO INSPECTORS WHO ARE FOUND TO BE MAING REFETITIVE HISTAKES.	D TO QUALITY CONTROL WITH FACTORY INSPECTO MR WHO ARE FOUND TO B	INSPECTION NS TO DISCUE E MANING PI	GROUP.	CORRE LEN A	CTIVE ACTION I REAS. INDIVIDU TAKES.	~ 2
	AUTOPILOT-SQUARE-A/B PROGRAMMER	A-90-04-203-F	FAR 27-43901-3	#109E#	¥ 54	ž 6		4000
	FAILURE MODE-FAILED TO LUNE AMALTSIS CONLO NOT BUT IT CONLO NOT HAVE	FAILURE MUGE-FAILED TO OPERATE AT PRESCRIBED TIME-THE SUBJECT PROGRAHMER WOULD NOT START OR INDICATE ZERO TIME, FAI URE AMALYSIS COULD NOT COMPIRM THE FAILURE, AN OPEN CURRENT LIMITER SMITCH SE NAS FOUND DURING THE FAILURE AMALYSIS BUT ST COULD NOT HAVE CONTRIBUTED TO THE REPORTED FAILURE.	JECT PROGRAHMER WOULD NY LINITER BASTCH SG	HOT START	2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	7 ¥ 7 ₹	ZERO TIME. F.	
	CONNECTIVE ACTION-NO CC	MO CORECCINE ACTION BECAUSE THE PAILURE MAS NOT COMPIRHED.	E MA NOT CONFIRMED.					
1	では、これのできないというとは、これでは、これできないできない。これできないできないできないできないできないできないできない。	AND THE PARTY OF THE PROPERTY	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT					_

GENERAL DYNAMICS CONVAIR DIVISION

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#### #P #P ##	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	ILOT SYSTEM-AJRBORN	¥				-
STRIK SUR-STREE	TEST/REPORT NUMBER FAILED COMPONENT MAINE	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF 7	SITE PRI		VENDOR NAME	
AUTOFILOT-SQUARE-A/B PROCRAMEN FAILURE MODE-EKRATIC OPEN RELAY IN THE FLIGHT CONTRO	AE61-0853/FC-6CO-01-0RE COMPOSITE-FACTORY REF FACTORY NO 60/C 610515 NO 11 OFERATION, FITCH PROGRAM DATA INDICATED EXTRANEOUS DEVIATIONS DURING THE TEST DUE TO A FAULTY CONTROL, CHECKOUT PANEL.	COMPOSITE-FACTORY EXTRANGOUS DEVIATE	EEF F	FACTORY 6 THE TEN	NO 60/C NO 1 DUE 10	C A FAULTY	20 M G G G G G G G G G G G G G G G G G G
SYSTEM EFFECT-ERRATIC CPERATION, VEHICLE EFFECT-COMPOSITE DELAYED, CORRECTIVE ACTION-MEMLACED FAULTY	HATION. DELAYED. POST-COMPOSITE TEST RESUIRED TO VERIFY SATISFACTORY RESOLUTION OF PROBLEM. ID FAULTY RELAY IN AGE.	ED TO VERIFY SATISF	ACTORY RES	OL. UT 1 OF	90 14		
AUTOMILOT-BAUARE-A/B	AE61-0910/FC-4CO-02-137	COMPOSTTE-PACTORY	1370 F.	FACTORY	04 04 04	u	******
FAILURE MODE-JULY OF TOLEN M BUCKOUT AMPLIFIER WAS HO	FAILUME MODE-JUT OF TOLENANCE, PITCH PROGRAM VOLTAGES MERE OUT OF TOLENANCE DURING THE COMPOSITE TEST. THE 65E PITC I BUCKOUT AMPLIFIER NAS HOT SETUP PRIOR TO COMPOSITE TEST START.	UT OF TOLERANCE DUS	11 HE THE CO.	#0817E	TE87. TI	4E 68E P17C	
SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS.	SCRETE SIGNALS.						
WENICLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTING REQUINED.	utreb.					
CORRECTIVE ACTION-SET UP	63E PITOH BUCKOUT AMPLIFIER PROPERLY.	۲.					
AUTOPILOT-SQUARE-A/B PROGRADAER	AC-61-0090781-604-A4-01	CAPTIVE	11F 81	37C	99		,
FAILURE HODE-FAIL TO OPEN THE FLIGHT PROGRAHER RES NOB. THE SIGHAL SHOULD HAN	FAILURE MOE-FAIL TO OFFRATE AT PRESCRIBED THE-THE EJECT RE-ENTRY WEHICLE DISCRETE SIGNAL WAS NOT RECEIVED BECAUSE. THE FLIGHT PROGRAMMER RESET TO ZERO TIME WHEN MISSILE ELECTRIC FOMER WAS SMITCHED TO EXTERNAL AT WEO PLUS 1.72.SECOMOS. THE SIGNAL SHOULD HAVE OCCURRED AT WEO PLUS B.D SECOMOS AS EVIDENCE OF WENNER CUTOFF BLS-ROUTINE OPERATION.	-ENTRY WEHICLE DISC IC POWER MAS SMITCH AS EVIDENCE OF WERN	RETE BIGHAI IED TO EXTEI HER CUTOFF	RNAL AT BLES-ROU	F RECEI	WED BECAUSE 3 1.72 SECO ERATION.	
BYSTEN DFTCT-IMPROPER DI	SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS-LACK OF VALIDATION OF PROGRAMMER GENERATION OF EJECT RE-ENTRY WENICLE DISCR TE,	F PROGRAMMEN GENERA	TION OF EU	CCT ME-E	ATRY WE	AICLE DISCR	
WENTCLE EFFECT-MONE.							
CORRECTIVE ACTION-UNKNOWN.							
AUTOFILOT-SQUARE-4/B	A-88-D4-261-F	FAR E7-41001-939	910900	CT.	8 8 0,03	u	•••
FAILURE MODE-OUT OF TOLERANCE, DURING MANSDUCER TO AN OUTPUT OF MORE TANN D T THE LOW WOLTAKE READING AT THE BITE THE LABORATORY UNDER THIS CONDITION.	FAILUPE MODE-OUT OF TOLEAAMCE, DURING CHECKOUT OF THE PROGRAMMER THE ROLL BET MOTOR WOULD MOT ADJUST THE ROLL BET T BANSDUCER TO AN OUTPUT OF MORE THAN D.4 V. FAILURE ANALYBIS DID NOT CONFIRM THE FAILURE, THE CONCLUSION MAS MADE THA T THE LCM VOLTAGE READING AT THE BITE MAS DUE TO AN OUT OF CALIBRATION VOLTMETER AS BIMILAR RESULTS MERE OBTAINED IN THE LABORATORY UNDER THIS CONDITION,	MER THE ROLL BET P 1D NOT CONFISH THE LIBRATION VOLTHETER	PAILURE, TI	HOT ADJ	JAT THE	ROLL SET TAS MADE THA	

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CORRECTIVE ACTION-NOME. ETR PERSONNEL MAVE BEEN INFORMED OF THE REBULTS OF THIS AMALYSIS.

GENERAL BYNAMICS CONVAIR DIVISION

12 JUN 1988

W. W. Carlo

TERT/REPORT NUM PAILED COMPOSENT AGRI-DREIL/PC-ECO-DI-DRA FRATION-DRE PLIGHT PROCRA I PAULTY RELAY IN THE CONTOCRA IS PRALTY RELAY IN THE CONTOCRA IS PRALTY RELAY IN THE STA THE DELAYED. PORT-COMPOSIT THE RELAY REPLACED. AARI-DIRI/PG-ACHO-D3-IC AARI-DIRI/PG-ACHO-D3-IC AARI-DIRI/PG-ACHO-D3-IC ARILINE PROCRAMER BY DISCRETE BIGMAL. THE BIAG SHE TIME. THE DELAYED. CONTRIBUTING I ALJA-D4-3478-F CIRCUIT BOARD ALJA-D4-3478-F CIRCUIT BOARD ALLURE COCURED TOO LOM FAILURE COCURED TOO LOM FAILURE COCURED TOO LOM FAILURE COCURED TOO LOM FRANCE. THE FAILURE WAS	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	MER DIF DATA BOURCE VEHICLE SITE PRI VENDOR NAME NAME PART NUMBER DATE DIF TIME DIF OTH VENDOR PART NO	COMPOSITE-FACTORY SIE FACTORY NO 60/C 88841G	ANMER START SIGNAL APPEARED TO DEACTIVATE AT TWO INTERVALS DURING IT TACL ASSEMBLY WAS REPLACED.	STRICH EFFECT-ERRATIC CPERATICS-PROGRAMER START SIGNAL APPEARED TO BE ERRATIC-RELAY IN GRE MAS FOUND TO BE FAULTY.	WENICLE EFFECT-COMPOSITE DELAYED. POST- COMPOSITE THISTING REQUIRED TO ISOLATE THE SOURCE OF TROUBLE.		04/C-E COMPOSITE-FR0/DPL 1040 36A NO 084788	FAILURE MOC-PREMATURE CPERATION, DURING THE STACING DISCRETE LOCKOUT TEST OF THE FIRST GAP TEST THE DISCRETE IMPUT TO THE THE ATLAS PROGRAMER REMAINED PRESENT CAUSING STACING AT EMBLE TIME, THE GROUND MONITORING EQUIPMENT PROVIDED SETTICIENT LOAD TO CAUSE THE CENTAUR PROGRAMMER SHITCH SCR TO ACTIVATE.	STSTEM EFFECT-INFROMER DISCRETE SIGNAL. THE STAGING DISCRETE LOCKOUT RENAINED PRESENT AT THE ATLAS PROGRAMMER INFUT CAUSING STAGING AT EMBLE TIME.	WENICLE EFFECT-COMPOSITE DELAYED. CONTRIBUTING FACTOR TO 30 MINUTE HOLD AT T-150.	FIER TEST.	FAR 810409 FACTORY YES 60/C 884183 27-41408-801 NO	FAILURE MODE-OUT OF SPECIFICATION. THE PITCH-3 AND 4 ABSEMBLY BOARD WAS IR/D WHENTHE PITCH OUTPUT VOLTAGE STEPPED F ROM 5.4 TO 2.8 VOLTS. FAILURE AMALYSIS COULD MOT COMPTRY THIS FAILURE. ALL ELECTRICAL TESTS MERE WITHIN TOLERANCE.	MOME-FAILURE OCCURED TOO LOME AGO TO TAKE ACTION. TUNIT RCVD FOR FAILURE ANALYBIS 29 OCT 1982).	FAR 810803 FACTORY NO 60/C	TOLERANCE. THE PAILURE WAS INDICATED BY A PITCH PROGRAM VOLTAGE OUT OF TOLERANCE ON THE AUTOMAT
	DIFFICULTIES MEVE	TEATUREPORT NUMBER PAILED COMPOMENT MANK	AE81-0881 /FC-8CO-01-081	FAILUME MODE-ERRATIC OPERATION-THE PLIGHT PROGRAMMER START SIGNAL APPEARED 8 ERPECTED ACTIVATION, A FAULTY RELAY IN THE CONTROL ASSEMBLY MAS REPLACED.	OPERATION-PROGRAMER START SIGN	TE DELAYED. POST- COMPOSITE TIE	CORRECTIVE ACTION-FAULTY RELAY REPLACED.	AA61-0111/P6-4CMO-03-104/C-E	FAILURE MOE-PREMATURE CPERATION, DURING THE STAGING DISCRETE LOCKOUT TO THE ATLAS PROCRAMER REMAINED PRESENT CAUSING STAGING AT ENABLE TINUPTICIENT LOND TO CAUSE THE CENTAUR PROGRAMMER SMITCH SCR TO ACTIVATE.	OPER DISCRETE SIGNAL. THE STAGING ENABLE TIME.	TE DELAYED. CONTRIBUTING FACTO	INCLATION CIRCUIT INSTALLED AFTER TEST.	A-JA-04-3478-F CIRCUIT BOARD	ECIFICATION, THE PITCH-3 AND 4 AILURE ANALTRIB COULD HOT COM	-FAILURE OCCURED TOO LONG AGO	AB-04-235	LERANCE. THE PAILURE WAS INDIC

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CONVAIR DIVISION

	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT BYSTEM-AIRBON	.		_
BYSTEN SUB-BYSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART HUMBER	VEHICLE BITE PRI	PRI VENDOR NAME OTH VENDOR PART NO	
TIVE ACTION-THE BES	CORRECTIVE ACTION-THE DESIGN GROUP IS STUDYING THE FACTORY TEST EQUIPMENT IN AN EFFORT TO CORRECT THE DIFFICULTIES ENCOUNTERED. OPERATORS OF THE TEST HAVE SEEN INFORMED AND MILL MONITOR FAILURES OF THIS TIPE IN THE FUTURE.	TEST EQUIPMENT IN A	EFFORT TO CORRECT	THE DIFFICULTIES THE FUTURE.	:
AUTOPILOT-SAUMRE-A/B PROGRAMMER	HG-88-04-277F CIRCUIT BOARD ASAL/DIODE-1M457	FAR E7-4144E-1	860 14 Y	YES SILICON TRANSI NO STOR CORP.	
FAILURE MODE-STRUCTURAL. SIGNAST) IN THE SMITCH S B ALITY SOLDERIMS.	RUCTURAL. BMITCH 3 MALFUNCTIONED DURING VIBRATION PER EOF 330.288.2. AMALYSIS REVEALED THAY DIODE CR BMITCH 3 BINARY ASSENDLY(CIRCUIT BOARD ASAI) OF THE PROGRANMER FAILED DURING VIBRATION DUE TO BUB-GU	ATION PER EOF 330.E OF THE PROGRAMER I	19.2. AMALYBIB REVEA AILED DURIMG VIBRAT	LED THAY DIODE CR.	
CTIVE ACTION-BIODER,	CORECTIVE ACTION-DIODER, TVPE IMIST, MANUFACTURED BY BILICON TRANSISTOR CORPORATION ARE NO LONGER IN USE IN THE FA	CH TRANSISTOR CORPOR	IATION ARE NO LONGER	IN USE IN THE FA	
AUTOFILOT~SAUARE~A/B PROGRAMMER	AE61-0746/FC-6C0-01-018	COMPOSITE-FACTORY	13F FACTORY N	7/05 OH	
FAILURE MODE-FAIL TO OPER D BECAUSE RECORDER NO 2 ST	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TINE- THE PLIGHT PROGRAMMER MURROUTINE S FUNCTIONS COULD NOT BE EVALUATE) BECAUSE RECORDER NO & STOPPED AT 266 SECONDS OF THE TEST.	PROGRAMMER SUBROUT	INE & FUNCTIONS COU.	D MOT BE EVALUATE	
STRIEM EFFECT-OPERATION D EVALUATED.	PERATION DOES NOT START, RECORDER STOPPED PRIOR TO START OF SUBROUTINE 3 START SO START COULD NOT BE	IOR TO START OF SUB	COUTINE & START SO S	TART COULD NOT BE	
LE EFFECT-COUNTDOWN	WENICLE EFFECT-COUNTDOMN ON COMPOSITE DELAYED- POST COMPOSITE TEST NESVINED TO DEMONSTRATE SATISFACTORY OPERATION.	TE TEST RESULRED TO	DEMONSTRATE SATISFA	CTORY OPERATION.	
CORRECTIVE ACTION-NOT KNOWN.	Š				
AUTOFILOT - SQUARE - A/B PROGRAMMER	PK-D4-243	FAR E7-43901-1	14E FAIRCHIL YES	YES 60/C NO	88378£
FAILIME MODE-FAILED OURIN ME FAILURE WAS NOT COMFIRM S FOM THE FAILURE MAS DUE	FAILIME MODE-FAILED DURING OPERATION. THE OPERATOR WAS UNABLE TO GET A ZERO TIME INDICATION ON THE CONTROL PANEL. T HE FAILURE WAS NOT CONTINED. ON CONFLETION OF FAILURE ANALYBIS. THE CONCLUSION WAS MADE THAT THE MOST PROBABLE CAUS 5 FOR THE FAILURE WAS DUE TO A MALFUNCTION IN GROUND SUFFORT EQUIPMENT.	LE TO GET A ZERO TIL BIB, THE CONCLUSION EBUIPMENT.	AE INDICATION ON THE MAS MADE THAT THE M	CONTROL PAMEL. T DAT PROBABLE CAUS	

CORRECTIVE ACTION-NOW. RELIABILITY IS NOWITORING PAILURES OF THIS TYPE FROM ALL BARES TO DETERMINE WHERE MALFUNCTIONS ACTUALLY OCCUR.

PASE DE18

18 Jun 1966

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	BASTER BASTER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	114E DIF	VEHICLE BITE PRI VENDOR MAME DATE DIF TIME DIF OTH VENDOR PART NO	¥ ::	
	AUTOFILOT-SEUARE-A/B PROGRAMMER FAILURE HODE-CUT OF TOL E TEST, THE IMPUT SIGNAL	UTORILOT-SQUARE-A/B AEGI-DGSE/FC-GCO-DG-DGG COMPOSITE-FACTORY 6F FACTORY NO GD/C ROGRANMER FAILURE HODE-CUT OF TOLERANCE, ROLL SERVO BIAS STEP FUNCTIONS MERE GREATER THAN EXPECTED AT TWO INTERVALS DURING THE TEST, THE IMPUT SIGNAL MAS ETRONEGUS DUE TO A FAULTY ROLL BUCKOUT AMPLIFIER IN THE AGE.	COMPOSITE-FACTORY TOMS WERE GREATER TH.	6F 610714 IAN EXPECTED	FACTORY AT 740 1	NO GD/C NO NYERVALS DURI		10000
	SYSTEM EFFECT-OPERATION	SYSTEM EFFECT-OPERATION TOO HIGH. IMPROPER INPUT SIGNALS CAUSED THE ROLL SERVO SIAS TO SE TOO HIGH.	AUSED THE ROLL SERV	O 81AS TO	NE 100 H10	i		
	WENTELE EFFECT-COMPOSITI	VENICLE EFFECT-COMPOSITE RESCHEDULED. A POST-COMPOSITE TEST WAS REQUIRED TO DEMONSTRATE PROPER SYSTEM OPERATION. Corrective action-faulty suckout amplifier in age replaced.	IT LANS REQUIRED TO C	Enoms tra te	PROPER S	FER OPERATIO	ż	
	AUTOPILOT-SQUARE-A/B PROGRAMMER	98-04-234 CIRCUIT BOND/ABAE BOARD	FAR 27-41001-831	26E 610710	AT .	3/05 OH		993780
	FAILURE HODE-ELECTRICAL VALUATION PROCEDURE, MIC THE BAIDLE WIRE WERE BL	FAILURE MODE-ELECTRICAL OPEN. THE BOOSTR ENGINE CUT-OFF (BECO) SWITCH 12 FAILED TO FUNCTION DURING THE PROGRAMMER E VALUATION PROCEDURE. MICROSCOPIC INSPECTION REVEALED THAT. IN THE HIGH POMER ASSEMBLY (ASAZ BOARD), RESISTOR RISG AND THE BRIDGE WIRE WERE BURNED ON ONE END CAUSING THE BRIDGENIRE TO OPEN. THE OPEN BRIDGENIRE MAS APPARENTLY CAUSED BY A SHORT DURATION HEAVY OVERLOAD FROM AN EXTERNAL BS VDC SOURCE.	(BECO) SWITCH 12 FAILED TO FUNCTION DURING THE PROGRAMMER E. IN THE HIGH POMER ASSENBLY (ASAZ BOARD), RESISTOR RISE AND EWIRE TO OPEN, THE OPEN BRIDGEWIRE WAS APPARENTLY CAUSED BY SOURCE.	ED TO FUNC 1885MBLY (A) EN BRIDGEN	IION DURII BAZ BOARDI IRE MAS A	46 THE PROGRAFI. #ESISTOR RU	MER E AND ED BY	
	CORRECTIVE ACTION-IS CORRECTIVE ACTION, CONFORENTS BOTH IN PARAFACTURING AND IN	CORRECTIVE ACTION-NO CORRECTIVE ACTION, MONEVER BURVEILLANCE WILL BE MAINTAINED ON THE PERFORMANCE OF THIS AND LIKE CONFONENTS BOTH IN MAMERICTURING AND IN THE FIELD.	KE VILL BE MAINTAIN	ED ON THE	PERFORMAN	E OF THIS AND	LIKE	
	AUTCP1L01-SQUARE-A/B PROGRAMMER	95-04-864 CIRCUI 190ARD/DIODE-116547	FAR 27-41001-925	106D 61070\$	VAPB	7£3 HO		8845R
	FAILURE MODE-STRUCTURAL T. THE PROGRAMMER CYCLED D THE FAILURE. THE CR-S E AMALTSIS WERE PROBABLY	FAILUME MODE-STRUCTURAL, THE ITEM PROGRAMMER SENT A CONSTANT VERNIER AND SUSTAINER CUTOFF SIGNAL, AND WOULD NOT RESE T. THE PROGRAMMER CYCLED CONTINUOUSLY, FAILURE ANLYSIS REVEALED THAT THE CR-1 DIODE OH THE ATAI CIRCUIT BOARD CAUSE D THE FAILUME, THE CR-1 DIODE HAD BEEN BROKEN PRIOR TO THE FAILURE, OTHER FAULTY COMPONENTS IDENTIFIED DURING FAILUM E ANALYSIS WENE PROBABLY CAUSES BY MUMAN ERROR IN SUBSEQUENT TROUBLE SHOOTING.	MAT VERNIER AND BUS' FELLED THAT THE CR-1 FAILURE. OTHER FALL NT TROUBLE SHOOTING	ATHER CUTO	FF SIGNAL THE ATAI WIS IDENT	AND WOULD NOT	RESE CAUSE ALUM	
1	CORRECTIVE ACTION-PERSONE ME EQUIPMENT OR OBSCURE QUIRED.	CORRECTIVE ACTION-PERSCAMEL AT ALL BASES ARE CAUTIONED AGAINST USE OF TROUBLESHOOTING PROCEDURES WHICH MAY DAMAGE T E EQUIPMENT OR OBSCUNE ORIGINAL PAILURE, RELIABILITY WILL MONITOR THIS TYPE OF FAILURE TO DETERNINE IF ACTION IS RE INTRED.	AINST USE OF TROUBLE	ISHOOTING P	ROCEDURES TO DETERM	WICH HAY DAN	10 AC 1	
	AUTOFILOT-SQUARE-A/B PROGRAMMER	A8-06-244	FAR 27-43201-019	53£,57E, FACTORY 9F 610628	FACTORY	9/9 9 0/9		
1	FAILURE MODE-FAILED DUM AAM FOBITION, FAILURE O TGST EBUIFMENT MAS THE C	PAILURE MODE-FAILED DURING OPERATION. AFTER RUNNING FOR APPROXIMATELY ED SECONDS, THE PROGRAMMER MOULD RESET IN THE ABH POSITION, FAILURE OF THE CANISTER MAS NOT CONFIRMED. IT MAS CONCLUDED THAT A HUMAN ERROR IN THE USE OF FACTORY YEST EAUTPMENT MAS THE CAUSE OF INCORRECT PROGRAMMER READOUT.	PPROXIMATELY EG SEC IT MAS CONCLUDED TH. UT.	MOS, THE P	ROGRAMMER ERROR IN	WOULD RESET I	TORY	

GENERAL DYNAMICS CONVAIR DIVISION

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848-8181EN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	DATE DIF TIME DIF	10	>	
CORRECTIVE ACTION-FACTORY PERSONNEL WERE ADVISED TO EXERCISE WORE CARE IN FOLLOWING THE PROPER PROCEDURES DURING PR OGRANDER CHECKOUT.	SOMMEL WERE ADVISED TO EXERC	118E HORE CARE IN FOLI	ONING THE PROF	ER PROC	EDURES DURING PR	\$ •
AUTOFILOT-SQUARE-A/B 98-04 PROGRAMMER TRANS	98-04-223 TRAMSISTOR	FAR 27-41001-929	22E 13 610621	r G	YES HUGHES AIRCRAF NO T	* 5 7 5 7
FAILURE MODE-ERRATIC OPERATION-TRANSISTOR 84 (HA7534) IN THE HIGH POKER 4 AD: ME ELECTRICAL CHARACTERISTICS WERE ERRATIC NACH TESTED. THE CRYSTAL MAS LOOSE AUSED BY A LOOSE BASE LEAD PULLED OUT 1/3E INCH IN THE GLASS TO METAL HEADER.	OPERATION-TRANSISTOR 84 (HA7534) IN RISTICS NERE ERRATIC NAMEN TESTED. TH LEAD PULLED OUT 1/3E INCH IN THE GLA	84 (MA7534) IN THE HIGH POKER 4 ADSEMBLY INDICATED A PARTIAL BREAKDOMM: 7 WERN TESTED. THE CRYSTAL MAS LOOSE ON 178 MOUNT AND FRACTURED. THIS MAS CINCH IN THE GLASS TO METAL HEADER.	HELY INDICATED N ITS MOUNT AF	A PART O PRACT	IAL BREAKDOMM. 7 URED. THIS WAS C	
CORRECTIVE ACTION-THE SENICONDUCTOR DIVISION OF HUGHES AIRCRAFT HAS ISSUED SPECIFICATION NO. 1-H DATED 11 SEPTEMBER 1981 SPECIFING VERY THOROUGH MECHANICAL AND ELECTRICAL PREPRODUCTION AND POST PRODUCTION INSPECTION TESTS. THE GRY STAL CENTERING AND WELDING OF JUNCTION LEADS HAS BEEN AUTOMATED TO ELIMINATE ANY NUMAN ERROR IN WORKMANSHIP.	Æ SENICOMDUCTOR DIVISION OF HUGHES AIRCRAFT HAS ISSUED SPECIFICATION HO. 1-H DATED 11 SEPTEMBER Thorough mechanical and electrical preproduction and post production inspection tests. The Cry liding of junction leads has been automated to eliminate any human error in morkmanship.	RCRAFT HAS ISSUED SPI HEPRODUCTION AND POS MATED TO ELIMINATE AI	CIFICATION HO	1-H DA ISPECTIO IN WORK	TED 11 SEPTEMBER H TESTS, THE CRY HANSHIF,	
AUTOPILOT - SQUARE - A/B 98-04 PROGRAMMER DIODE	98-04-233 DICDE	FAR 27-41001-929	17E ETR 610615	YES MO	0	603778
FAILURE MODE-ELECTRICAL OPEN. DURING THE PRECOUNT OPERATION, CONTINUITY CHECKS INDICATED THAT DIODE CR-1 IN THE BOO STER JETTISON CIRCUITRY HAD FAILED. THE FAILURE MAS CONFIRMED. THE DIODE MOULD FAIL INTERMITTENTLY OPEN-CIRCUITED WH EN OME LEAD WAS WERY SLIGHTLY DISPLACE. THE SILICON BUTTON WITHIN THE DIODE HAD BEEN DISPLACED FROM ITS HOUNTING MAP ER EITHER IN DIODE MAMPACTURE OR ON INSTALLATION.	ICAL OPEN. DURING THE PRECOUNT OPERATION, CONTINUITY CHECKS INDICATED THAT DIODE CR-1 IN THE BOOF FALLED. THE FAILED. THE FAILED, THE DIODE WOULD FAIL INTERHITTENTLY OPEN-CIRCUITED WHISTLY DISPLACE. THE SILICON BUTTON WITHIN THE DIODE NAD BEEN DISPLACED THON 178 MOUNTING MAP INSTALLATION.	ION, CONTINUITY CHECK HED, THE DIODE WOULD WITHIN THE DIODE HA	INDICATED THE FAIL INTERHITY BEEN DISPLACE	TENTLY O	CR-1 IN THE BOOPEN-CIRCUITED WHITE WAR	
CORRECTIVE ACTION-GD/C IS INVESTIGATING THE LEAD FORMING OPERATION PERFORMED ON DIODES AND RESISTORS PRIOR TO THEIR INSERTION MILL BE TAKEN, WHERE MECESSARY.	D/C IS INVESTIGATING THE LEAD PORNING OPERATION PERFORMED ON DIODES AND RESISTORS PRIOR TO PROGRAMMER CIRCUIT BOARDS. ACTION TO IMPROVE THIS OPERATION WILL BE TAKEM, WHERE MECESSARY.	OPERATION PERFORMED (N DIODES AND I	ESISTON	S PRIOR TO THEIR MECESSARY.	
AUTOFILOT-BEUARE-A/# 98-00	96-04-£56	FAR 27-45205-5	EZE ETR 610614	4 6 50	5/ 03 •	:
FAILURE MODE-FAILED TO GRENATI FROM MINUS TO A PLUS POSITION IT MAS COMCLUDED THAT THE SUBJE E TO SOME OTHER CAUSE.	TO OPERATE AT PRESCRIBED TIME. THE ROLL PROGRAMMER SET CLUTCH APPEARED TO SLIP IN TRANSPER TIME POSITION DURING THE PERFORMANCE OF PROGRAMMER EVALUATION. THE PAILURE COULD NOT BE CONTIRMED. THE BUBJECT ITEM IS IN MORMAL OPERATING CONDITION AND THAT THE FAILURE SYMPTOMS AT ETS WERE DU	ML PROGRAMER SET CLURGGRAMER EVALUATION	TCH APPEARED THE FAILURE OF THE PAILURE	OULD HO	IN TRANSFER TIME T BE CONTRHED. S AT ETR WERE DU	
CORRECTS WE ACTION-HOME.						
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NATEN BLB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	\$17E 71ME DIF	# 0	VENDOR NAME VENDOR PART W.	
AUTOFILOT-SEUARE-AVB PROGRAHHUR	AA&1-0073/71-\$01-00-17 D1:00£	COUNTROWN	*1001	11 - 7000	7E8 60/C	5/0 5	:
PAILUNE MODE-OPEN GLECT	FAILUME MODE-OPEN (ELECT), BHUNT DIGDE IN BOOMIER JETTIBON BAITCH OF PROGRAMMER FOUNG TO BE OPEN.	N SMITCH OF PROGRAMM	ER FOUND TO	N340 38 0			
STATEM EFFECT-IMPROPER DISCRETE SIGNALS.	DISCRETE SIGNALS.						
VEHICLE EFFECT-HOME, PRO	VEHICLE EFFECT-MOME, PROBLEM WAS RESOLVED AND PROGRAMMER REPLACED DURING HOLD FOR ANOTHER REASON.	REPLACED DURING HOLD	FOR ANDIM				
CORRECTIVE ACTION-PROCEA AUTOFILOT-SEUARE-A/B	CORRECTIVE ACTION-PROGRAMMEN NEMLACED. (CORRECTIVE ACTION ON PROGRAMMEN UMMONN) TOPILOT-SAUME-A/B 9K-04-210 CIRCUIT BOARD CIRCUIT BOARD	FAR ET-45201-819	\$1052¢	FAFB	7E\$ 40/0	:0/C	:
FAILURE MODE-FAIL DURING OPERAT WE RUNS. SMITCHES B. 10, AND 11 CUMD ON AFAI CIRCUIT BOARD PINS.	FAILURE MODE-FAIL DURING OPERATION-DURING APCHE TEBT RECEIVED NO-GO ON ROLL GUIDANCE EMBLE SMITCH ON FOUR SUCCESSI WE RUNS. SMITCHES S. 10: AND 11 CHANGED STATE ERRATICALLY SO THAT ROLL GUIDANCE EMBLE IMPROFER. COMFORMAL COATING F GUND ON ATAL CIRCUIT BOARD PINS.	EIVED NO-60 ON ROLL 64	UIDANCE EN	ABLE SMIT	5 0 5 0	FOUR SUCCESSI	
CORRECTIVE ACTION-INSPEC	CORRECTIVE ACTION-INSPECTION OF ALL CIRCUIT BOARD PING FOR CONFORMAL COATING AND NEW MANUFACTURING TECHNIGUE TO PRE WENT CONFORMAL COATING GETTING ON PING DURING MANUFACTURE.	OR CONFORMAL COATING	SHD NEW WAL	MAFACTURE	₹ 31	CHMIGUE TO PRE	
AUTOFILOT-SAUME-A/B	96-D4-F3E TRAMS18TOR	FAR 27-45301	1001	E78	N O	TES RMEEN NO	*
FAILURE MODE-ERRATIC OPE NDS EARLY, AND THE PROGRA THE COPHTER BOARD ASSEMBL	FAILURE MODE-ERRATIC OPERATION—THE ASIS SIGNAL FROM THE PROCRAMMER HAS 10 SECONDS EARLY. THE PVT SIGNAL WAS SO SECONDS EARLY. THE PVOCRAMMER RESET AT 207-3 SECONDS. THE PAILURES WERE DUE TO A FAULTY TRANSISTOM (RHEEM 2MAST) ON THE COMMICA BOARD ASSEMBLY. THE 64 THANSISTOR ON THE CUTPUT OF THE TS BINARY WAS FAILING INTERHITTENTLY.	MOGRAHMER WAS 10 SECONDS EARLY, THE PVT SIGNAL PAILNES WERE DUE TO A FAULTY TRANSISTON (RMEE) UT OF THE TS BINARY WAS FAILING INTERMITTENTLY.	ONDS EARLY A FAULTY NB FAILING	THE PUT TRANSISTO INTERNIT	# 15 P	AL MAS BO SECO EEM EMAST) ON F.	Andrews
CORRECTIVE ACTION-NOME,	CORRECTIVE ACTION-MOME, AS THIS IS THE FIRST PIELD PAILURE OF THIS TRANSISTON.	RE OF THIS TRANSISTON					
AUTOPILOT-SQUARE-A/B PROGRAMMER	BK-04-205	FAR 87-43201-618	156	rv.	9 9)/g	:
FAILURE MODE-FAIL TO OPERATI LED TO GIMBAL AS PROGRAMMED.	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME-DURING MYDRAULIC FILL AND BLEED PROCLOURES, THE BOSSER ENGINES FAI ED TO GIMBAL AS PROGRAMMED.	FDRAULIC FILL AND BLE	ED PROCEDU	REB. THE	18003	ER ENGINES FAI	
 CORRECTIVE ACTION-WOME C	CORRECTIVE ACTION-NOME ON THIS ITEM, THE BERVO-AMP-FILTER IN THE AUTOPILOT BUB-SYSTEM AT THE TIME OF FAILURE CAUSED EXROMEOUS REJECTION OF THE PROGRAMMER.	R IN THE AUTOFILOT BU	9-8787EH A	THE THE	8	FAILURE CAUSED	
	er e	المارية المراجعة والمراجعة والمراجعة والمستحاطة والمستحددة والمراجعة والمراجعة والمراجعة				PAGE ORES	7

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	1116 014	4.	GRAINER N INDICATED COLATE CO	RESET A	=	IMPROPER CANT RETA NS OF THE HE TRANSI	# 54	ERLOND DU	77.	E MECELVE	
	DATE DIF	12E 610510	O THE PROD	PROGRAMME	12E 610502	IBITED AN 10 DESIC COMMECTIO RING IN TI	7£ 610500	PEN BY OM	14E 610430	D 140 VCR	
	DIF DATA BOURCE PART NUMBER	FAR 27-41001-927	S WOLT IMPUT LINES THE RESETS. FAILURE	WHICH MIGHT CAUSE	FAR 27-41001-017	SET PROPERLY AND EXH BOARD, THE BERRYLCG UITING THE INTERNAL NESICCANT RETAINING	FAR 27-41001-909	DARD USAZAR BURHED C	FAR E7-45E01-019	O CANDS 181: 180: AM	
	TEST/REPORT NUMBER FAILED COMPONENT MAME	PR-04-231	IC OPERATION DUE TO TRANSIENTS ON THE 115 VOLT IMPUT LINES TO THE PROGRAMMER WHEN THE ARMA MOLD-R TIVATED RESULTED IN INTERMITTENT PROGRAMMER RESETS. FAILURE AMALYSIS INDICATED THAT THERE WAS NO TO A THE ASSOCIATE CONTRACTOR INTERFACE.	TE AND CORRECT TRANSIENT VOLTAGE PROBLEMS WHICH MIGHT CAUSE PROGRAMMER RESET ACTIONS.	98-04-E33 CIRCUIT BOARD/TRANSIBTOR	FAILURE MODE-ELECTRICAL SHORT. THE PROGRAMMER MOULD NOT RESET PROFERLY AND EXHIBITED AN IMPROPER FITCH OUTPUT. THE MAINMAINTENANT OR ENTER MADE SHIBITED AN IMPROPER FITCH OUTPUT. THE MAINMAINTON AS ON CIRCUIT BOARD. THE BERRYLCO 10 DESICCANT RETAINING RING MAD DISTORMAND TO THE TRANSISTOR. CORRECTIONS OF THE TRANSISTOR. CORRECTIVE ACTION-6.E. IS INITIATING ACTION TO SECURE THE DESICCANT RETAINING RING IN THE TRANSISTOR.	90-04-£03 CIRCUIT DOMED/DICDE	DURING OPERATION-CR-5 DIODE ON CIRCUIT BOARD URAÇAR BURNED OPEN BY OVERLOAD DURING NET CABLE CONN PRIOR TO THE PROGRAMMER FAILURE. WTR APPRAIZED OF AMALYBIB RESULTS. BECOMDARY FAILURE REGUIRES NO OTHER ACTION.	DK04-£04	DUMING CHEMATICH-DUMING ARCHE CHECK HO-GO CARDS 131, 130, AND 140 NERE RECEIVED (LAST STEP IN PIT) ; CUT-CFF, AND BOOSTER JETTISCH RESPECTIVELY). HONE-THE FAILURE WAS NOT CONFIRMED.	
e de la companya de	STSTEE SCS-STEE	AUTOFILOT-BELANE-A/B PROCRAIMER	FAILURE MOG-ERRATIC OPE ESUME SMITCH MAS ACTIVATE PROGRAMMER FAILURE. COSDECTIVE ACTION-IT IS	PROBLEMS, INVESTIGATE AND	autopilot-Bruare-A/B Programmen	FAILURE MODE-ELECTRICAL MALFUNCTION RESULTED FRO ORIED AND MAD HOWED TO THE CORRECTIVE ACTION-6.E. I	AUTOFILOT-SEUARE-A/B PROGRAMMER	FAILURE MODE-FAIL DURING ECTOR PROSLEM JUST PRIOR 1 CCARECTIVE ACTION-WTR APP	AUTCELLOT - BEUARE - A/B PROGRAMMER	FAILURE MODE-FAIL DURING CH PROGRAM, BOOMTER CUT-C CORRECTIVE ACTIOM-WOME-1	

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887439 SYSTEM EFFECT-IMPROPER ANALOG SIGNAL-THERE WAS NO EVIDENCE OF THE ROLL OF PITCH PROGRAMS OR ACTIVATION OF SWITCH 15 FAILURE HODE-SHORT-28 VOLT LEAKAGE ON THE RESET LINE AFTER UMBILICAL EJECTION, EITHER AT THE UMBILICAL FACE OR ELSE CORECTIVE ACTION-CORECTIVE ACTION CONCERNING CONFORMAL COATING TECHNIQUES IS UNKNOWN. HOMEVER, SEVERAL PACKAGING CHAMES HERE INCORPORATED AS A RESULT OF THIS FAILURE. METAL LASHERS WERE REPLACED BY FIBRE MAMERS, ADDITIONAL CLEAR RANCE MAS PROVIDED FOR MODULE FRAMES IN VICINITY OF PRINTED CIRCUIT. BOARD COMMECTORS. ¥ 6 1000 61 U423 FLIGHT 27-45301-3 AE41-0245/M-401-00-100

CORRECTIVE ACTION-REVISED RESET CIRCUITAT TO INHIBIT RESET INFLIGHT, ELIMINATING POSSIBILITY OF INADVERTENT RESET O 22 E o 1000 FLICHT 87-45303-3 AE61-0245/P4-401-00-100 TRUCTION AT 42.34 SECONDS. AUTOFILOT - BRUARE - A/B A LEAKAGE PROBLEMS.

VENICLE EFFECT-IMPROPER TRAJECTORY-FAILURE OF A/P TO GENERATE ROLL AND PITCH PROGRAMS NECESSITATED RANGE SAFETY DES

MHERE EXTERNAL TO THE PROGRAMMER.

AUTOFILOT - SQUARE - A /B

FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. POSSIBLE STOPLINE LEAKAGE TO GROUND AT THE UMBILICAL FACE OR ELSEN Mere external to the programmer. SYSTEM EPPECT-OPERATION DOES NOT START-THERE WAS NO EVIDENCE OF THE ROLL OR PITCH PROGRAMS OR ACTIVATION OF SWITCH

CORRECTIVE ACTION-ADDED FILTERS TO ALL 115 VOLT, BS VOLT, DISCRETE COMMAND, START AND GTOP INPUT TO THE PROSRAMMER. ALTERED THE KID AND STOP CIRCUITS TO ELIMINATE LEAKASE. TRUCTION AT 42.34 BECOMB.

VEHICLE EFFECT-IMPROPER TRAJECTORY-FAILURE OF A/P TO GENERATE ROLL AND PITCH PROGRAMS NECESSITATED TANGE BAFETY DES

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORME

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AES1-DEAS/M-401-00-100 CONNECTOR ON CIRCUIT BOARD ASAS

AUTOFILOT-SQUARE-AFB

PROGRAMMER

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TEST/REPORT NUMBER FAILED COMPOMENT NAME

VENDOR NAME VENDOR PART FAILURE MODE-OPENIELECT)-COMPORMAL PLASTIC COATING WAS FOUND ON CIRCUIT BOARD ASAS COMMECTOR PINS OF THE RECOMERED PROGRAMMER. THIS PROGRAMMER FROM RUMMING. THIS

IS ONLY ONE OF SEVERAL POSSIBILITIES FOR PROGRAMMER FAILURE.

SYSTEM EFFECT-IMPROMER ANALOG SIGNAL-THERE WAS NO EVIDENCE OF THE ROLL OR PITCH PROGRAMS OR ACTIVATION OF SWITCH 15

VEHICLE EFFECT-IMPROPER TRAJECTORY-FAILURE OF A/P TO GENERATE ROLL AND PITCH PROGRAMS NECESSITATED RAMGE SAFETY DES

TRUCTION AT 42.34 SECONDS.

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13 JUN 1988

DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORNE

XULA AN - BOM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	DATE DIF TIME DIF OTH	111E DIF	OTH VEHOCR PART HO	
AUTOPILOT-BAUARE-A/B PROGRAPHLR	AE61-0E45/P4-401-00-100	FLICHT 27-45301-3	1000	7.0	7E8 60/C 7E8	*****
FAILURE M.DE-ERATIC OPERATION-A POS THE PROGRAMMER TO CONTINUALLY RESET.	FAILURE M.DE-ERRATIC OPERATION-A POSSIBLE REPETITIVE TRANSIENT FROM RF THE PROGRAMMER TO CONTINUALLY RESET.		TRICAL INT	ERFERENC	OR ELECTRICAL INTERPERENCE WHICH MOULD CAUSE	
SYSTEM EFFECT-IMPROPER AN	STSTEN EFFECT-IMPROPER ANALOG SIGNAL, THERE WAS NO EVIDENCE OF	OF THE ROLL OR PIT	PITCH PROGRAMS OR ACTIVATION	3 OR ACT	IVATION OF SMITCH 1	
VEHICLE EFFECT-IMPROPER T TRUCTION AT 42.34 SECONDS.	VEHICLE EFFECT-INPROPER TRAJECTORY-FAILURE OF A/P TO GENERATE ROLL AND PITCH PROGRAMS NECESSITATED RANGE SAFETY DES Ruction at 42.34 seconds.	ITE ROLL AND PITCH P	ROSRAHB NE	CE8817A7	ED RANGE BAFETY DES	
CORRECTIVE ACTION-THE ASIS ENABLE PIN OF PLOUIS SUPPRESSION DIGOES RE INCORPORATED IN THE MIGH POMER	COKRECTIVE ACTION-THE ASIS EMBLE RELAY WIRE WAS REMOVED FROM THE PROGRAMMER START LEAD AND ROUTED THROUGH SEPARATE PIN OF PIOUL, SUPPRESSION DIODES ADDED TO RELAYS IN ASIS UNIT, RE-ROUTED ASIS ARM SIGNAL LEADS. CURRENT LIMITERS ME E INCORPORATED IN THE HIGH POMER SMITCH OUTPUT CIRCUITRY.	ION THE PROGRAMMEN I	JART LEAD ARM S:GMAL	AND ROUT LEADS.	ED THROUGH BEPARATE CURRENT LIMITERS WE	
AUTOPILOT-SQUARE-A/B	AA61-0059/M-4CO-01-100 TIMER CIRCUIT	COMPOSITE-J FACT 27-45301-3	1000 610418	14 200	VES CONVAIR NO	1695691
FAILURE MODE-ERRATIC OPEN	FAILURE MODE-ERRATIC OPERATION. PROGRAMMER RESET TO ZERO AT 200 SECONDS. PROBLEM LATER ISOLATED	1 200 SECONDS. PROBL	נא ניזינא ו	SOLATED	TO T'HER CIRCUITRY.	
SYSTEM EFFECT-IMPROPER DI ATIC TIMER OPERATION.	SYSTEM EFFECT-IMPROPER DISCRETE SIGNAL. BOORTER CUTOFF BACKUP DISCRETE NOT RECEIN'D DURING LOOP TEST BECAUSE OF	LUP DISCRETE NOT REC	ELWD DUR!	* COO	TEST BECAUSE OF ERR	
WEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE DELAYED. AN EXISTING HOLD WAS EXTENDED TO REPLACE THE POGRAMMER	ENDED TO REPLACE THE	POGRAMME	ė		
AUTOFILOT-SQUARE-A/B	45.6	COMPOSITE-FRD/DPL	Qr.e	3766-2	YES	****
FROGRAMMER FAILURE MODE-FAIL TO OPERATE AT PRESCR COMMANDS SHOULD HAVE BEEN LOCKED OUT. STREN EFFECT-INFROPER ANALOG SIGNALES WEHICLE EFFECT-COMPOSITE DELAYED. CORRECTIVE ACTION-PROGRAMMER REPLACED.	OGRAMMER FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. PITCH DISPLACEMENT GYRO RESPONDING TO GUIDANCE COMMANDS ANDLD HAVE BEEN LOCKED OUT. STRIEN EFFECT-IMPROPER ANALOG SIGHALS. VEHTCLE EFFECT-COMPOSITE DELAYED. CORRECTIVE ACTION-PROGRAMMER REPLACED.	NACEMENT GYRO RESPY	410403 20176 TO 6		CORPORADS NAFEN THESE	
AUTOFILOT-BRUARE-A/B PROGRAMMER	AE81-0273/FC-9CO-01-029	COMPOST TE-PACTORY	23E 610322	FACTORY	7/99 QX	
FAILURE MODE-FAIL DURING CTION. THE GLITCH MAS ATTR	FAILURE MODE-FAIL DURING OPERATION. THE JETTIBON BOORTER FUNCTION INDICATED TION. THE GLITCH MAS ATTRIBUTED TO CIACUITAT AND DICOES IN THE AGE.	MCTION INDICATED A THE AGE.	6L17CH PR1	OR TO AC	GLITCH PRIOR TO ACTIVATION OF THE PUN	
STREM EFFECT-ERRATIC OF	STRICK EFFECT-GRRATIC OPERATION-FAULTY AGE CAUSED ERRATIC OPERATION OF AIRBORNE STREM.	DEGRATION OF AIRBORN	K SYSTEM. OPERATION.			
					recognistation approximated a	

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSONNE

The state of the s	A STATE OF THE PARTY OF THE PAR	DIE DATA ACRES	VEHICLE	A17E	PRI VENDOR	¥	
SUB-SYSTEM	FAILED COMPONENT NAME	PART NUMBER	,	TIME DIF	OTH VENDOR	ART NO	
CORRECTIVE ACTION-THE AGE	THE AGE FLIGHT CONTROL PANEL MAS REPLACED						
AUTOFILOT-SQUARE-A/B AI	AE61-0273/FC-5CO-01-025	COMPOSITE-FACTORY	#54. 610322	FACTORY	5/03 03 03 03 03		8 7 6 7 R
FAILTHE HODE-ERRATIC OPERATION, INDICATED A GLITCH PRITORS IN THE AGE.	TIC OPERATION-CHANNEL E OF HIDNESTERN RECORDER NO. E, MONITORING THE JETTISON BOOSTER PACKAGE FUNC SLITCH PRICR TO ACTIVATION OF THE FUNCTION, THE GLITCH MAB ATTRIBUTED TO COMMUTATE CIRCUITRY AND D	MDER NO. 2, MONITOR 1, THE GLITCH WAS AT	ING THE JE	111304 BC	XOSTER PACKAG ITE CIRCUITAY	7 C B	
SYSTEM EFFECT-IMPROPER DISCRETE SIGNALS.	CRETE STEMALS.						
WEHICLE EFFECT-COMPOSITE RI	WENTCLE EFFECT-COMPOSITE RE-SCHEDULED. POLT-COMPOSITE TESTING REGULRED.	ING REQUIRED.					
CORRECTIVE ACTION-THE PLIGHT CONTROL	HT CONTROL ASE CONTROL PANEL MAS REPLACED	REPLACED.					
AUTOPILOT-SQUARE-A/B A	AE41-0247/FC-9CO-02-034	COMPOSTIE-FACTORY	30E 610319	5/0 3	NO FACTORY NO		707665
FAILURE MODE-ERRATIC OPERA SES AT 31 AND 59 SECONDS.	FAILURE MODE-ERRATIC OPERATION-THE TEST PROGRAMMERS CAUSED AN UNEXPECTED GOOSTER ENGINE MOVEMENT PRIOR TO SERVO BIA ES AT 31 AND 59 SECONDS.	AN UNEXPECTED GOOST	ER ENGINE	HOVENENT	PRIOR TO SE	NO BIA	•
SYSTEM EFFECT-EKRATIC OPER. TEST PROGRAMER TAPES.	SYSTEM EFFECT-EKRATIC OPERATION-UNEXPECTED BOOSTEN ENGINE HONEMENTS CAUSED BY SIMULTANEGUS FUNCTIONS PROGRAMMED ON EST PROGRAMMER TAPES.	KONEMENTS CAUSED BY	81 MUL TANEC	NS FUNCT	IONS PROGRAM	8	
VEHICLE EFFECT-COMPOSITE DI	VEHICLE EFFECT-COMPOSITE DELAYED. POST COMPOSITE TESTING REQUIRED TO FIND CAUSE.	EQUIRED TO FIND CAUS					
CORRECTIVE ACTION-THE TEST	TEST PROGRAMMER TAPES WILL REVISED TO ALLEVIATE THIS PROBLEM ON FUTURE TESTING.	S ALLEVIATE 1913 PRO	BLEK OH FL	JTURE TES	1186.		
AUTOFILOT - SQUARE - A/S AI	AE81-0247/FC-5CO-01-034 BAITCM	COMPOSITE-FACTORY	36E 610316	FACTORY	i č		20144
FAILURE MODE-FAIL TO OPERATE AT THE ILED TO ACTIVATE UPON RECEIPT OF THE EPLACED.	to operate at the prescribed tine. The vernier cutoff command smitch in the programmer package fa You receipt of the vernier cutoff direre prom the inertial guidance bysten. The programmer has r	ERNIER CUTOFF COMMAN E PROM THE INERTIAL	SWITCH I	IN THE PROTECTION TO	JERAIDER PACI E PROGRAIDEE	7 5 5	
STATEM EFFECT-OPERATION DO	ATION DOES NOT START. WERNIER CUTOFF SMITCH DID NOT OPERATE.	TON DID NOT OPERATE.					
VEHICLE EFFECT-COUNTDOMN OF	WEHICLE EFFECT-COLMTDOMM OR COMPOSITE DELAYED OR RESCHEDULED. COMPOSITE REAAM.	D. COMPOSITE REAAM.					
CORRECTIVE ACTION-PROGRAMMER IR/D AND REPLACED.	ER IR/D AND REPLACED.						
AUTOFILOT-BAUARE-A/B AL PROGRAMMER W	AA81-0047/F3-9CO-01-14 Wirin & Plice	COMPOSITE-& FACT	16E 810317	#	4 O		
FAILURE MODE-OFFM (ELECT). AM OF FULLED OUT OF A BIX MIRE SPLICE.	(ELECT), AK OPEM CIRCUIT IN THE RE-ENTAY VEHICLE PRE-ARM CIRCUIT WAS FOUND TO BE CAUSED BY A WIRE X wire splice.	VEHICLE PRE-ARM CIR	T TOO	ound To I	E CAUBED BY	7	
			4		144	PART OFF	

CONVAIR DIVISION

	18 JUN 1986	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	¥				
	8787EX 848-8787EX	TEST/REPORT HUMBER: FAILED COMPONENT MANE	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	111E DIF	= z	VENDOR NAME.	A Transfer of the new Transfer of
1	STATEM EFFECT-IMPROPER CUIT.	STREET EFFECT-IMPROPER DISCRETE SIGNALS. THE PROGRAMMER PAILED TO BLOM THE PUSE IN THE RE-ENTRY VEHICLE PRE-ARM CIR	PAILED TO BLOW THE PUR	E IN THE P	C-ENTRY	EH1C	LE PRE-ARH CIR	:
	WENICLE EFFECT-MOME.							
	CORRECTIVE ACTION-UMEN	CORRECTIVE ACTION-LINENCIAN. THE PROGRAMMER MAS REPLACED.						
	AUTOPILOT-SQUARE-A/S PROGRAMMER	#K-04-E60 CIRCUIT BOARD	FAR 27-41001-909	19E 610314	FAIRCHIL YES	ă ă	50/C	*****
	FAILURE HODE-ELECTRICA HAD OCCURRED, FAILURE UIT BOARD COMMECTOR.	FAILURE MODE-ELECTRICAL OPEN. DURING APCHE TESTS THE BOOGTER ENGINES CONTINUED TO GINDAL AFTER BOOSTER ZERO COMMAND Mad occurred. Failure amalysis determined that the Failure Lars due to conformal coating on Pin 36 of the Airai Circ Ht board commettor.	STER ENGINES CONTINUED IE JAS DUE TO CONFORM	TO CIMBAL	ON PIN S	008 TE	r zero commid The Albai Circ	. •
	CORRECTIVE ACTION-GD/C 19UE HAS BEEN DEVELOPED FACTORY.	CORRECTIVE ACTION-6D/C HAS INITIATED IMPROVED INSPECTION PROCEDURES FOR COMFORMAL COATING PER ECF 1113. A NEW TECHN ALE HAS BEEN DEVELOWED FOR PROTECTING BOARD PINS DURING COMFORMAL COATING MAICH HAS ELIMINATED THIS PROBLEN IN THE ACTORY.	PROCEDURES FOR CONFOS CONFORMAL CONTING MAIG	MAL COATIN	G PER ECI	110	S. A NEW TECHN ROBLEM IN THE	
	AUTOPILOT-SGIARE-A.T	98-04-186 CIRCUIT BOARD COMMECTOR	FAR 27-41001-901	610307	5	7. 0.	9	•••
	FAILURE MODE-ELECTR, CAL	ctr.cal open. During Laboratory testing migh power skitch 18 failed 10 operate. Failure has due to Lett diring manufacturing, on Pin 35 of the usable circuit Noard.	HIGH POWER SMITCH 18 F F THE USABAR CIRCUIT P	ATLED TO C	PERATE.	3	RE MAS DUE TO	
	CORRECTIVE ACTION-(1) 1NG. (2) ALL FIELD CANT NEW TECHNIQUE FOR PROT	CORRECTIVE ACTION—(1) ALL NEW MANUFACTURED CIRCUIT BOARDS ARE INSPECTED UNDER ULTRA VIOLET LIGHT FOR CONFORMAL COAT NG. 12) ALL FIELD CANTSTERS ARE BEING INSPECTED AND CLEANED DURING THEIR RETURN TO THE FACTORY (S) 60/C DEVELONED A NEW TECHNISUE FOR PROTECTING DOARD PINS DURING CONFORMAL COATING.	S ARE INSPECTED UNDER NED DURING THEIR RETUR COATING.	ULTRA VIOL	ET LIGHT ACTORY IS	8 8	CONFORMAL COAT	
	AUTOFILOT - SQUARE - A/B	99-04-174 CIRCUIT DOMED	FAR 87-41435-8	61030£	FACTORY	ž Q		******
	FAILURE MODE-SHORT-CANNISTER LEY ASSEMBLY MAS SHORT CIRCUITED BET PLUG BODY AND THE CIRCUIT BOARD.	FAILUKE MODE-SHORT-CANMISTER LEVEL TESTING AFTER PRODUCTION VIBRATION TESTING INDICATED THAT THE PROGRAMMER PITCH E ASSENDLY MAS SHORT CIRCUITED BETWEEN PIN 29 AND 30. PAILURE MAS DUE TO A WIRE CLIPPING THAT MAS TRAPPED BETWEEN THE PLUG BOOT AND THE CIRCUIT BOARD.	ION VIBRATION TESTING URE MAS DUE TO A WIRE	INDICATED CLIPPING 1	THAT THE	2 × 2	RAIDER PITCH & ED BETNEEN THE	
	CORRECTIVE ACTION-6D/C D WITH BOLDER AND WIRE	CORRECTIVE ACTION-60/C IMPROVED PACTORY CLEAMLINESS PROCEDURE, PACTORY PERSONNEL APPRIZED OF THE PROBLEMS ASSOCIATE I with solder and wire Debris.	EDURE, PACTORY PERSON	EL APPRIZE	D OF THE	80	LENS ASSOCIATE	
1								

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CONVAIR DIVISION	
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	115 JUN 1988	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	FILOT SYSTEM-AIRBOR	¥				,
L	STSTEN SCS-STSTEN	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE	817E 11ME DIF	# 5 # 5	VENDOR NAME VENDOR PART NO	
1	AUTOPILOT - SQUARE - A/B	90-04-176 CIRCUIT BOARD TRANSISTOR	FAR 87-41001-905	*10 *10222	5	2 2		•
	FAILURE MODE-ELECTRICAL : GRAMMER MAS RUMNING. THE GALL GALL SHORT CIRCUITING CAUC	FAILUME MOSE-ELECTRICAL BMORT, DUMING SYSTEM TESTS THE PROGRAMMER ZERO INDICATION MOULD MOT DISAPPEAR MMILE THE PRO- Grammer was running. The safe-arm programmer function was intermittent Werm operated, Failure was due to tramsister G-10 short circuitims causing the arm-safe eg vdc to appear on the programmer zero indication line.	HAMMER ZENO INDICAT STERNITIENT MEN OPE ON THE PROGRAMMER Z	TON WOULD RATED. FAI	NOT DISAL LUNE NAS	E SEE	WALLE THE PRO TO TRANSISTER	
	CORRECTIVE ACTION-TVA 3T	CORRECTIVE ACTION-TVA 37369 RELEASED TO REMONE THE EXCESS ELECTRICAL LOAD FROM THE 4-10 TRANSIBTER	CLECTRICAL LOAD FROM	THE 8-10	TRANSI & TI	5		
<u> </u>	AUTOPILOT-SQUARE-A/B	AE61-0092/FC-5CO-02-031 3MI TCH-ELECTRONI C	COMPOSITE-FACTORY	31E 610204	FACTORY	3 0		
	FAILURE MODE-ERRATIC OPERATION-PROGRAMMER SECONDS AFTER ACTIVATION-BHOULD REMAIN ON.	FAILURE MODE-ERRATIC OPERATION-PROGRAMMER PRODUCED A GLITCH AT BUSTAINER CUTOFF. ALBO HIGH POMER BAITCH 12 MEBET 2 Econds after activation-benald remain on.	AT BUSTAINER CUTOF	г. алво ні	CH POLER	174	CH 12 RESET 2	
····	SYSTEM EFFECT-ERRALL COM	SYSTEM EFFECT-ERRAIL, OMERATION, GLITCH ON PROGRAMMER OUTPUT AND UNSCHEDULED RESET OF SMITCH IE	JT AND UNSCHEDULED R	ESET OF SA	ATCH 1E.			
	VEHICLE LFFECT-COMPOSITE	VEHICLE LFFECT-COMPOSITE RESCHEDIALED. RERUN OF COMPOSITE NADE WITH NEW PROGRAMMEN.	LE WITH NEW PROGRAM	į				
	CORRECTIVE ACTION-PROTHAINER REPLACED	UNER REPLACED.						
	AUTOPILOT-SQUARE-A/B PROGRAPHER	SD-54-171 CIRCUIT BOARD DIGDE	FAR 27-41001-909	7E 610206	VAFB	۲ و د و		
	FAILURE MODE-ELECTRICAL OF ILURE WAS DUF TO DIGNE CR.	FAILURE MODE-ELECTRICAL CHEM, DURING TESTING THE PROGNAMMER FAILED TO SEMERATE THE BOOSTER CUT-OFF SIGNAL UBCOM. FA ILURE HAS DUE TO DIOTE CR-S BEING OMBIDERED TO BE THE CAUBE. L'ERCHADING OF THE BCO LINE IS CONSIDERED TO BE THE CAUBE.	R FAILED TO GENERATE HISTORY OF INTER PAC	THE BODST	ER CUT-CI EPTACLE	14 SE	GMAL UBCOS. FA EMS: ACCIDENTA	Marina de M Marina de Marina de M
·~	CORRECTIVE ACTION-GD/C ALA NOIDED IN THE PUTURE.	CORRECTIVE ACTION-60/C APPRIZED BASE PERSONNEL OF THE FAILURE AND SUSPECTED CAUSE SO THAT SIMILIAR FAILURES CAN BE NOIDED IN THE PUTURE.	JRE AND BUSPECTED CA	USE SO THA	T SIMILE	2 5	ILIMES CAN BE	····
	autopilot-square-a/B Programmer	AC-61-0065/82-502-A2-06	CAPTIVE	61.0207	87C 120-12	2 0	y/93	
	FAILURE MODE-FAILED TO OPERATE AT PR	ESCRIBED TIME.	THE AUTOPILOT PROGRAMMER PAILED TO SUPPLY A DISCRETE CUTOFF BISH	1.ED TO 9.U	PPLY A D	I SCRE	TE CUTOFF BIGH	
	SYSTEM EFFECT-OPERATION DOES NOT START.	SYSTEM EFFECT-OPERATION DOES NOT START. THE LACK OF A DISCRETE SIGNAL RESULTE:	THE LACK OF A DISCRETE SIGNAL RESULTED IN THE SUSTAINER ENGINE FIRING FOR MAS INITIATED BY BACKUP EMBINE TIMER.	18 THE 81	STAINER	ž	E PIRIM FOR 0	
	VENICLE EFFECT-LATE BUBTAINER EMBINE CUTOFF.	TAINER EMBINE CUTOFF.	,					

CONVAIN DIVISION

	Organia Pikano	5					
18 204 1888	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	MILOT SYSTEM-AIRBOR	¥		1		_
 PTDIEX PCS-PTEX	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	817E 11ME DIF	# 5 6	VENDOR HAME VENDOR PART NO	
 CORRECTIVE ACTION-THE P	CORRECTIVE ACTION-THE PROGRAMMER WAS REMOVED AND BENT TO PR	TO PLANT 71 (BAN DIEGO)	FOR FAILURE AMALYSES.	E AMALYS	. <u>.</u>		*****
 AUTOPILOT-SQUARE-A/B PROGRAPPER	AE61-0092/FC-3CO-01-031	COMPOSETE-FACTORY	31E 610203	FACTORY	8 3	5/09	:
 FAILURE MODE-FAILURE TO ABRING OF INTEGRATOR MA.	FAILUME MODE-FAILUME TO OPERATE AT PRESCRIBED TIME. THE PLIGHT CONTROL PROGRAMMER RAM SLOM. THIS CONDITION CAUSED M ASKING OF INTEGRATOR MALING AT SUSTAINER CUTOFF. FAULT WAS CAUSED BY LOW INVERTER PRESUENCY.	CHT CONTROL PROGRAD	HER RAN SU	O4. 7H18	0 0 0	TION CAUSED H	
 STATEN EFFECT-OPERATION UT FUNCTIONS.	STRIEM EFFECT-OPERATION STARTS TOO LATE. LOM INVENTER PREQUENCY CAUSED PROGRAMMER TO BE LATE IN GENERATING ITS OUTP	JENCY CAUSED PROGRAM	MER TO BE	LATE IN	CENER	111NG 118 OUTP	
 VEHICLE EFFECT-COMPOSIT	VEHICLE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE RERAM.						
 CORRECTIVE ACTION-INVENTER RESET	TER RESET.						
 AUTOPILOT-SQUARE-A/B PROGRAMMER	A-90-04-3102-F ACCELENOMETER-CAPACITOR	FAR 27-04099-1	1080 41020E	11	ž g	YES EDCLIFF NO	***
 FAILURE MODE-SMORT (CLE CORRECTIVE ACTION-UNKNO	FAILURE MODE-SHORT (ELECT)-INTERNITTENT GROUND CAUSED BY ELECTROLYTIC CAPACITOR FAILURE. CORRECTIVE ACTION-UNENDAM, FIELD PERSONNEL CAUTIONED TO CHECK TEST EQUIPMENT FOR POSSIBLE OWERLOAD CONDITION OR	ECTROLYTIC CAPACITO	R FAILURE.	E OWERLO	වී ද	DITICH OR 1K5	
 AUTOPILOT-SGUARE-A/B PROGRAMMER	AE61-0007/FC-5CO-01-021 01:00E	COMPOST TE-FACTORY	21E 610130	FACTORY	£ 45		038368
 FAILURE MODE-OUT OF SPE	OF SPECIFICATION-THE SECOND LEVEL OF THE PITCH PROGRAM VOLTAGE MAS 1.6 V WHEN 2.10 PLUS OR MIMUS AN OPEN 2100E IN THE PITCH PROGRAM CONTROL MATRIX MAS THE CAUSE.	TICH PROGRAM WOLTAG X. MATRIX WAS THE CA	E 448 1.6	A NHEN P	¥ 07.	US OR HINUS O	
 STSTEM EFFECT-INFROPER AMALOG STSMAL.	AHALOS BISHAL.						
 VEHICLE EFFECT-COMPANT	VEHICLE EFFECT-COMPANITE RESCHEDULED. SYSTEM AND COMPOSITE RETEST WAS REQUIRED	RETEST NAS REQUIRED	•				
 CORRECTIVE ACTION-THE P	PROGRAMMER WAS REPAIRED AND REINSTAL	REINSTALLED ON THE VEHICLE.					
 AUTOFILOT - SEUARE - A / B PROGRAPHIER	AE81-0034/FC-5CO-01-018	COMPOSTITE-PACTORY	18E 6101E	FACTORY	2 <u>2</u>	y/ 9	
 PAILUKE MICE-FAIL TO OP O THE DIFFERENCE IN FREE COMPUTER.	FAILURE WICE-FAIL TO CPERATE AT PRESCRIBED TIME. THE BUSTAINER CUTOFF DISCRETE BIGNAL WAS INITIATED TOO EARLY DUE T O THE DIFFERENCE IN FRESUGMCY BETWEEM THE INVERTER: WHICH DRIVES THE A/P COMPTER AND THE CRYSTAL CONTROLLED GUIDANCE COMPUTER:	HER CUTOFF DISCRETS LIVES THE AZP COUNTS	S S CHAL W	S INITIA CRTSTAL	CONTRO	NO EARLY DUE T NLED GUIDANCE	
BYBIEN EFFTCT-IHPROPER	ACPER DISCRETE SIGNALS.						
						9830 257d	~~

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731.6 × 6 × 6 × 6 × 6 × 6 × 6 × 6 × 6 × 6 ×	TEST/REPORT NUMBER FAILED COMPONENT NAME	STAREMONT NUMBER DIF DATA SOURCE V	VEHICLE ATTE	VEHICLE SITE PRE VENDOR NAME DATE DEP TIME DEF OTH VENDOR PART NO	
VEHICLE EFFECT-COMPOSI	VEHICLE EFFECT-COMPOSITE DELAYED. PARTIAL COMPOSITE RETEST HAS REQUIRED	EST MAS AEQUIRED.	And the second s	And the state of t	***************************************
CORRECTIVE ACTION-THE	AIRBORNE INVENTER FREGUENCY WAS READJUSTED TO COINCIDE WITH THE COMPUTER FREGUENCY.	EABJUSTED TO COINCIDE	WITH THE COMPUTER P	REQUENCY.	
autopilot-square-a/B Programmer	9K-04-189	FAR R7-41001-608	15E VAFE	9 9	
FAILURE MODE-ERRATIC OF PAGE OF TO BE CAUSED BY OBCILI	FAILURE MODE-ERRATIC CMERATION-DURING MARCHE TESTS NO-GOS WERE RECEIVED AND THE PROGRAMMER STOPPED. FAILURE BELIEVE D to be caused by oscillations that Appear on the Marche Stop Lime.	OS NERE RECEIVED AND TO	HE PROGRAMMER STOPP	ED. FAILURE BELIEVE	
CORRECTIVE ACTION-ALL IS PERFORMED.	CORRECTIVE ACTION-ALL PROGRAMMERS RETURNED TO 6D/A FOR MODIFICATION TO CHANGE THE MANNER IN MILLS INC. TOWN TO IS PERFORMED.	MODIFICATION TO CHANGE	INE MANNEK IN WILL		
AUTOPILOT-SAUARE-A/B	9K-04-170 CIRCUIT BOARD CAPACITOR	FAR 27-41001-893	15E FAFB 610112	YES NO	-
FAILURE MODE-ELECTRICAL S OPERATING AT TWICE ITS (ARY ON THE USAIAI CIRCUIT B 40 WOLT LINE DUE TO THE	FAILURE MODE-ELECTRICAL OPEN. DURING MAPCHE TESTS NO-GOS WERE OSTAINED ON 21 CARDS FOLLOWING CARD 40. PROGRAMMER MA 3 OPERATING AT TWICE ITS NORMAL SPEED. FAILURE MAS DUE TO OPEN CIRCUITING OF THE C-6 CAPACITOR CAUSING THE CPG-8 BIN ART ON THE USAIAI CIRCUIT BOARD TO OPERATE IMPROPERLY. RESISTER R-8 ON THE SAME BOARD MAS CHARRED. RIPPLE ON THE PLU 8 40 WOLT LINE DUE TO THE OPEM- CIRCUITING OF THE C-8 CAPACITOR CAUSED THE BINARY TO OPERATE IMPROPERLY.	NA WERE COTAINED ON 21 TO OPEN CIRCUITING OF T ESINTER R-4 ON THE SAM PACITOR CAUSED THE BIN	DSTAINED ON 21 CANDS FOLLOWING CARD 40. P. CINCUITING OF THE C-6 CAPACITOR CAUSING TR-6 ON THE SAME BOARD WAS CHARRED. RIPPLY CAUSED THE BINARY TO OPERATE IMPROPERLY.	ID 40. PROGRAMMER NA LUSING THE CPG-4 BIN D. RIPPLE ON THE PLU ROPERLY.	
CORRECTIVE ACTION-CAUSE	E OF FAILURE COULD NOT BE DETERNINED. BELIEVED TO BE AN ISOLATED OCCURRENCE. 40/C WILL INTENS.	NED. BELIEVED TO BE AN	ISOLATED OCCURREN	E. 60/C WILL INTENS	
AUTOFILOT - SQUARE-A/B PROGRAMMER	AE81-0053/FC-5CO-01-01F	COMPOSITE-FACTORY	17E FACTORY 610107	NO 60/C	•
FAILURE MODE-ERRATIC OF	FAILURE MODE-ERRATIC OPERATION. THE AIRDORNE ROLL INTEGRATOR WAS MOT CONTROLLED BY THE TEST PROGRAMMER BUE TO AN IN CORRECTLY WIRED AGE CONTROL PANEL.	HATOR WAS NOT CONTROLL	ED BY THE TEST PROF	GRANNER DUE TO AN IN	
BYBTEN EFFECT-ERRATIC OPERATION.	OPERATION.				
WENICLE EFFECT-COMPOSI	HOBITE RESCHEDULED. POST COMPOSITE TESTING REQUIRED.	STIME REQUIRED.			
CORRECTIVE ACTION-CORRECTED AGE	ECTED AGE CONTROL PAHEL WIRING.				}
AUTOFILOT-BAUARE-A/B PROGRAMER	98-D4-080 AMPLIFIER-INTEGRATOR	FAR 7-41011-077	608409 E7R	768 60/c	
PAILURE MODE-ERRATIC OF AND PIECE OF LACIME THIS	FAILURE MODE-ERRATIC OPERATION-DURING TEBING, THE YAW INTEGRATOR AMPLIFIER GUTPUT WAS INTERMITTEN). A BOLDER BLOG AND PIECE OF LACIMS THINE MERE MEDGED BETWEEN AMPLIFIER AND MOUNTING BLOCK.	INTEGRATOR AMPLIFIER UAND HOUNTING BLOCK.	CIPUT AND INTERNET	TEN). A BOLDER BLOS	
				description and the second sec	 ,
				PASK OX28	

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GENER. DYNAHICS CONVAIR DIVISION

CORRECTIVE ACTION-PROGRESS	TAILEN COMPONENT NAME	BART NUMBER	VEHICLE DATE DIF	VEHICLE SITE	PRI VENDOR MANE OTH VENDOR PART NO	3
	PROGRESSIVE INSPECTION OF ELECTRO HECH INTEGRATOR BLOCK INITIATED DURING SUB-ASSEMBLY.	INTEGRATOR BLOCK INIT	ATED DURE	18 V - 978 - 94	£ι θ ιγ.	***************************************
AUTOFILOT-SALARE-A/B BE	P0-04-134	FAR R7-41001-809	76	#54	YES 40/C	11000
FAILURE MODE-FAILED TO OPEN MALS AFTER STAGING.	TO OPERATE AT PRESCRIBED TIME, DURING MAPCHE CHECKOUT THE UNIT FAILED TO SEND PROPER OUTPUT SIS-	MAPCHE CHECKOUT THE L	NIT FAILE	TO SEND	PROPER OUTPUT 1	•
CORRECTIVE ACTION-NOME. FAILURE NOT CONFIRMED.	LURE NOT CONFIRMED.					
AUTOPILOT - SQUARE - A/B AE	AE60-0015/FC-4CO-04-048	COMPOSTIE-PACTORY	000	FACTORY YE	YE\$ 60/C	•
FAILURE MODE-FAIL TO OPERATI EFFRENCE TO GUIDANCE STAGING	FAILURE HODE-FAIL TO OPERATE AT PRESCRIBED TIME, ALL BTAGING PUNCTIONS OCCURRED 1.8 SECONDS LATER THAN HOMINAL IN FERENCE TO GUIDANCE STAGING DISCRETE COMMAND, CAUSE UNKNOWN.	M PUNCTIONS OCCURRED	1.5 SECON	S LATER 1	HAN HOMEHAL EN	
SYSTEM EFFECT-OPERATION SYARTS TOO LATE.	ITS TOO LATE.					
MENICLE EFFECT COMPOSITE RE-	WENTCLE EFFECT COMPOSITE RE-SCHEDULED. PROGRAMMER REPLACED ANG PROPER OPERATION VERIFIED ON BUBSEQUENT COMPOSITE.	AND PROPER OPERATION	WERIF1ED O	W BUBBER	ENT COMPOSITE.	
CORRECTIVE ACTION-THE PROGRAMMER WAS REPLACED.	MACH WAS REPLACED.					
AUTOPILOT - SQUARE - A/B AEG PROGRAMMER	AE61-0312/PC-4CO-G4-G64	COMPOSTTE-FACTORY &	200 F.	PACTORY YES	3/93 1	***
FAILURE MODE-FAIL DURING OFF	FAILURE MODE-FAIL DURING OFTRATION-BOLL PROGRAMMER WAS IMPROPERLY BET? RESULTING IN GAINS SY PERCENT BELOW MOMINAL.	PERLY SET, RESULTING	IN CAINS	N PERCENT	PELON HOHIMAL	
BYSTEM EFFECT-OPERATION TO LOW.	ż					
WEMICLE EFFECT-COMPOSITE DELA	WEMICLE EFFECT-COMPOSITE DELATED, POST COMPOSITE TESTING REGUIRED.					
CORRECTIVE ACTION-ROLL PROGRAHMER	HOER RESET.					
AUTOPILOT-BAUARE-A/B PD-D PROGRAMMER	PD-04-163	FAR 7E	7E UTA	22	5/9 5	
PAILURE MODE-ERRATIC OPERATION TIME A PERIOD DURING MATCH ET I GEGILLATION ON THE APCHE STON	PAILURE MODE-ERRATIC OPERATION. DURING APCHE AUTOPILOT-GUIDANCE INTEGRATEL TEST THE PROGRAMMER RESET TO ZERO, FOLLO WING A PERIOD DURING WHICH IT STOPPED, INSTEAD OF CONTINUING TO RUN, AFIER IT WAS RESTARTED. FAILURE DUE TO A 18 YOL	KE INTEGRATEL TEST TO O RUN, AFTER IT WAS I	E PROCRAM	MER RESET PAILURE D	TO ZERO, FOLLO	

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CORECCTIVE ACTION-PROGRAMMER RE-DESIGNED TO PERFORM THE STOP FUNCTION IN A DIFFERENT MANNER. AUTOFICOT-SQUARE-A/B SE-D4-148 PROGRAMMER FAILED TO SECULT BOARD CONNECTOR 27-41001-913 FAILURE MODE-CONTAMINATION. DURING LABORATORY EVALUATION TEST THE PROGRAMMER FAILED MHEN THE CH PROGRAMMER FAILED MHEN THE US.	PROGRAMMER RE-DENIGNED TO PERFORM THE STOP FUNCTION IN A DIFFERENT MANNER. BS-04-148 CIRCUIT BOARD COMMECTOR RP-41001-913 ANIMATION. DURING LABORATORY EVALUATION TEST THE PROGRAMMER FAILED WHEN THE SECOND STEP AT THE TO REACH THE PRESCRIBED WOLTAGE. PAILURE DUE TO COMPORMAL COATING ON THE USASAR COMMECTOR PINS.	NOF FUNCTION IN A DIF					7
UTOFILOT-BEUARE-A/B BR-D- ROGRAMMER CIRCI FAILURE MODE-CONTAMINATION. D' CH PROGRAM FAILED TO REACH THE	4-149 UIT BOARD COMECTOR URING LABORATORY EVALUATION PRESCRIBED VOLTAGE, FAILURE		Z =	MED.			•
-	URING LABORATORY EVALUATION PRESCRIBED VOLTAGE, FAILURE	R7-41001-913	601214		YE& 60/0	ý	-
		TEST THE PROGRAMMER FAILED WHEN THE SECOND STEP AT THE PIT : DUE TO CONFORMAL COATING ON THE USASAR COMMECTOR PINS.	ATLED WHEN	THE BECO E USASAR	NO BTE	AT THE PI	<u> </u>
CORRECTIVE ACTION-ALL PRINTED CIRCUIT BOARDS RE-INSPECTED UNDER ULTRA-VIOLET LIGHT FOR EXCESSIVE CONFORMAL COATING. ULTRA-VIOLET LIGHT INSPECTION MADE A PART OF THE ROUTINE MANNFACTURING PROCEDURE. ALL RETURNED ELECTRONIC PACRAGES DISASSENDLED AND REINAPECTED.	CIRCUIT BOARDS RE-INSPECTED MADE, A PART OF THE ROUTINE.	UNDER ULTRA-VIOLET L MANUFACTURING PROCEDU	RE. ALL ME	KCESSIVE TURNED EL	CONFORI ECTRONI	ML COATING	. 1
AUTOPILOT-SQUARE-A/B AAGO	AAGG-G119/PE-401-0G-91 CLCCK, PROGRAMMER RESET CIRCUIT	MACHINADS.	#10 #01214	12	ទី ទី		*04144
FAILURC MODE-ERRATIC OFFIRALIED FROM MOMENTANT PROGRAMMER RESETS DUE TO INDUCED MOLTAGE SURGES IN THE MANNAL ESET CIRCUITAT. CONDITION RESULTED FROM MOMENTANY PULLIN AND DROPOUT OF 3000 PSI RELAT IN BOOSTER HYDRAULIC SYSTEM. SYSTEM SYSTEM EFFECT-IMPROPER DISCRETE SIGNAL. LOSS OF PROGRAMMER ZERO DUE TO INADVERTANT RESET SIGNALS DURING ENGINE GIMALIMA.	N. ERRATIC INADVERTANT PROGRALIN A LIED FROM MOMENTARY PULLIN A LIED SCHALL, LOSS OF PROGRAMME	ANT PROGRAMMER RESETS DIME TO INDUCED MOLTAGE SUBSES IN THE MANAL R PALLIN AND DROPOUT OF 3000 PSI RELAY IN BOOSTER HYDRAULIC SYSTEM. PROGRAMMER ZERO DUE TO INADVERTANT RESET SIGNALS DURING ENGINE GIMES	HOUGED WOL	TACE SURG BOOSTER BICHALS	HYDRAU HYDRAU Daning	NE MANUAL IC SYSTEM. ENGINE GIN	4 . •
YEMICLE EFFECT-COUNTDOMM ABORTED AND RESCHEDULED. PROBLEM UNRESCLYED DURING COUNTDOMM. CORRECTIVE ACTION-PLACED DICDES ACROSS 2000 AND 3000 PSI RELAYS.	ABCRIED AND RESCHEDULED. PROBLEM DICDES ACROSS EDGG AND 3000 PSI	F UNRESOLVED DURING CO RELAYS.	AMITDOME.				
AUTOFILOT-BRUARE-A/B 90-04	B0-04-137	FAR E7-41001-495	7-E 60120E	£ 5	3 C C	ņ	:
FAILURE MODE-FAIL TO OPERATE AT PIESCRIBED TINE-DURING APCHE TESTING THE PROGRAMMER WOULD NOT START 50 PER CENT OF THE TINE, FAILURE NOT CONTRHED, HOMEVER, PROGRAMMER WOULD NOT START WITH SK CHM LOAD TO GROUND.	AT PIESCRIBED TIME-DURING APCHE TESTING THE PROGRAMMER MOULD NOT B D. HOMEVER, PROGRAMMER WOULD NOT BTART WITH BK CHH LOAD TO GROUND.	CHE TESTING THE PROGRES NOT BEART WITH SK CH	AMER MOULI	D NOT STA	0 t t	CR CENT OF	
CORRECTIVE ACTION-LARMONN, WIR PERSONNEL NOTIFIED RESARDING RESULTS OF THE TESTS.	R PERSONNEL NOTIFIED REGARDI	HE RESULTS OF THE TES	.53.				
AUTOPILOT - BEUARE - A/B ALED- PROGRAMMER POTES	aee0-1007/FC-4c0-03-000 PotentionEter	COMPOST TE-PACTORY	000				

GENERAL DYNAHICS CONVAIR DIVIBION

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9991 WOT 81	DIFFICULTIES REVIEW-AUTOPILOT STRIEM-AIRSORME	JOPILOT BYBTEH-AIRBO	¥.			
37.21CH 8.00 - 37.3 TCH	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOUNCE PART MUNBER	VEHICLE DATE DIF	VEHICLE BITE PATE DATE DATE	PRI VENDOR NAME OTH VENDOR PART NO	3 3
SYSTEM EFFECT-IMPROPER A	ROPER ANALOS SIGNALS.					•
VEHICLE EFFECT-COMPOSITE	VENICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTELL REGULAED	Mediado.				
CORRECTIVE ACTION-THE TO	TORGUIMS POTENTIONETER WAS READJUSTED.	.e.				
AUTOPTIOT - SQUARE - A/B	98-04-141 AHPLIFIER	FAR 27-41000-625	601120	ETR ETR	vE &	***************************************
FAILURE MODE-OUT OF TOLE TRMED BELIEVED TO BE BOME	OF TOLERANCE-VERNIER & PITCH UMBALANCE READINGS NERE OUT OF SPECIFICATION LIMITS. FAILURE NOT CONF BE SOME PROBLEM EXTERNAL TO SERVO AMPLIFIER ASSEMBLY.	READINGS WERE OUT OF FIER ASSEMBLY.	PP C1F1CA71	ON LINITS.	FAILURE NOT	8
CORRECTIVE ACTION-UNKNOWN.	M. CAUSE OF FAILURE UNDETERMINED.					
AUTOFILOT - SQUARE - A/B PROCRA PREER	AS-04-133 CIRCUIT BOARD-COMECTOR	FAR 27-41001-898	\$00 \$01125	FACTORY	7ES 60/C NO	***************************************
FAILURE MODE- CONTAMINAT WE CONFORMAL COATING LEFT	FAILIKE MODE- COMTANINATION. DURING MISSILE CHECKOUT, SMITCH 19 OPERATED INTERMITTENTLY. FAILURE WAS DUE TO EXCESSI WE CONFORMAL COATING LEFT ON PRINTED CIRCUIT BOARD COMMECTOR PINS.	ITCH 18 OPERATED INTE TOR PINS.	RMI TTENTLY	FAILURE 1	AS DUE TO EXC	
CORRECTIVE ACTION-UNKNOW ADE A PART OF THE REGULAR	CORRECTIVE ACTION-LAKNOWM. ALL STOCK SURVEYED AND INSPECTED UNDER ULTRAVIOLET LIGHT. ULTRAVIOLET LIGHT INSPECTION M DE A PART OF THE REGULAR NAMERACTURING PROCEDURE.	TED UNDER ULTRAVIOLET	LIGHT. UL	RAVIOLET I	ICHT INSPECTI	z g
AUTOPILOT - SQUAKE - A/B	88-04-13D AMPLIFIER-CAPACITOR	FAR E7-41000-607	*01118	SYCANORE YES	7E3 HO	ž.
FAILURE MODE-ERRATIC OPE ARD OVER IN YAM AT MAKIM URS OR MORE OF MOLD TIME. SIME THE ACTION.	FAILURE MOCE-ERRATIC OPERATION-DURING A PLIGHT CEQUENCE CYCLE, AT STAGING PLUS D.6 SECONDS. THE SUSTAINER STEPPED H ARD OVER IN YAW AT MAXIMUM VELOCITY FOR A DURATION OF APPROXIMATELY D.2 SECONDS. MALFUNCTION APPEARS ONLY AFTER R MO URS OR MORE OF MOLD TIME, CAPACITORS WITHIN THE CANISTER INTEGRATOR SECTION CHARGE AND THEN ULTIMATELY DISCHARGE CAU SIME THE ACTION.	CYCLE, AT STAGING PLU ROXIMATELY D.E SECOND INTEGRATOR SECTION CM	S D.8 SECONS. MALFUMCTAREE AND TH	DS. THE SU TON APPEAR	STAINER STEP S COLY AFTER ELY DISCHARGE	2 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
CORRECTIVE ACTION-CIRCUI	CORECTIVE ACTION-CIRCUIT REDESIGNED TO PROVIDE BLEEDER RESISTORS TO PROLLUCE FAILURES DURING UNUSUALLY LONG PERIOD WITH FOMER APPLIED.	RESISTORS TO PACLLUCE	FATLURES C	LATING UNU!	WALLY LONG M	8
AUTOPILOT-SQUARE-A/B PROGRAMMER	86-04-129 CIRCUIT BOARD-TRANSISTOR	FAR 87-41001-823	2C 601110	BYCAMORE	2 Q	——————————————————————————————————————
FAILURE MODE-OUT OF TOLE BPEED, FAILURE CAUSED BY	FAILURE MODE-OUT OF TOLERANCE-DURING OPERATION ON THE NISSILE THE PROGRAMMER RAN AT 5.6 TIMES THE MORNAL OPERATING SPEED, FAILURE CAUSED BY A POORLY SOLLECTED COLLECTOR CONNECTION ON TRANSISTER \$1.	SSILE THE PROGRAMMER ECTION ON TRANSISTER	AAN AT 3.0	TINES 1HE	HORINI OPERA	<u> </u>
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DIPFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

8787EM 808-8787EM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E	SITE PRI VENDOR NUME TIME DIF OTH VENDOR PART NO	
13 11 NO 11 ON 19 11	CORRECTIVE ACTION. TEAMTHED AUPWEILLANCE OF PRINTED CIRCUIT BOARD INSPECTION.	UIT BOARD INSPECTION.			and the state of t	94130
AUTOFILOT - SQUARE - A/B	AC-60-0046/82-315-A7-02	CAPTIVE 27-41001-883	2E 601118	84.	YES 60/C	***
FAILURE MODE-FAILURE DURING OPERATION- LEVACTION OF THE SENI - CONDUCTOR IN THE		AT 34 SEC THE PROGRAMMER RAN AT TMICE ITS NORMAL SPEED DUE TO AN APPARENT MA Area of the 1/2 second bimant.	ITS HORMAL	and distance	TO AN APPARENT MA	
EN EFFECT-IMPROPER	STSTEN EFFECT-INPROPER ANALOG SIGNALS- CAUSED BOOSTER ENGINE TO SE GINSALED DURING SUSTAINER STAGE OPERATION.	STINE TO BE STHBALED D	ATHG BUSTA	INER STAG	E OPERATION.	
VEHICLE EFFECT-MONE.						
CORRECTIVE ACTION-PROGRAMMER UMS IND.	IAMMER WAS IND.					
AUTOFILOT - SAUMAE - A/B PROGRAMER	90-04-128	FAR E7-41000-613	7E 901110	£	YE1 60/C	1
FAILURE MODE-FAILED TO BOUCER AFTER THE BIGHML	FAILURE HODE-FAILED TO OPERATE AT PRESCRIBED TIME-DURING WAPCHE CHECKOUT THERE WAS WISSONAL FROM THE PEEDBACK TRAN NOUCER AFTER THE SIGMAL TO THE PATCH INTEGRATOR WAS INITIATED. FAILURE HOT CONFIRMED.	HAPCHE CHECKOUT THERE	TRMED.	SHAL FROM	I THE PEEDBACK TRAN	
CORRECTIVE ACTION-LANGUAL	į					
AUTOPILOT - SQUARE - A/B PROGRAMER	AC-60-0041/8E-512-A6-02	CAPT VE 27-41001-969	2E 60101-1	34.58	YES GD/C	£
URE MOE-FAILURE DE	FAILURE MODE-FAILURE DURING OPERATION- PROGRAMMER FAILED TO MAINTAIN PROPER VOLTAGE DURING STEP S OF THE PITCH PROG IAN.) TO HAINTAIN PROPER W	OLTAGE DURI	NG STEP	OF THE PLICH PROG	
EN EFFECT-IMPROPER	SYSTEM EFFECT-IMPROPER AMALOG SIGMALS" IMPROPER PITCH PROGRAM WAS GENERATED.	POGRAN MAS GENERATED.				
WENTELE EFFECT-HOME.						****
CORRECTIVE ACTION-NOME.						
AUTOFILOT - BAUARE - A / B PROGRAMMER	88-04-123 COMMECTOR	FAR E7-41001-869	#-E 601000	SYCANORE YES	YES MO	e for 177 and the second
FAILURE MODE-FAILED DURI LTAGES EXCEPT THE FOURTH ICH IS OUT OF TOLERANCE.	FAILURE MOSE-FAILED DURING OPERATION-DURING A STATIC RUN THE PROGRAMMER CORRECTLY GENERATED THE FIRST FOUR PITCH WO TAGES EXCEPT THE FOURTH WOLTAGE MAY NOT MAINTAINED THE PROPER LEWITH OF TIME. THE FIFTH WOLTAGE STEPPED TO ROBY, WH CH IS OUT OF TOLERANCE, SUSPECTED LAUSE MAS COMPORMAL COATING ON PITCH MODULE PLUG PINS LEFT ON DURING MANUFACTURIN.	i the programmer corresponder length of the dating on Pitch module	THE FIFTH	VOLTAGE NOT THE THE THE THE THE THE THE THE THE TH	FIRST FOUR PITCH VO STEPPED TO E.BV. WH DURING MANUFACTURIN	

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	13 200 1868	DIPTICULTIES REVIEW-A	DIPPICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORME	¥				٢
	STATEM BUR-STATEM	TENTARPORT HUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	DATE DIF	\$17E	15	SITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	•
	CORRECTIVE ACTION-ULTRAVIOLET INSPE	M-ULTRAVICALET INSPECTION OF ALL CIRCUIT BOARDS HAS BEEN HADE A PART OF THE REGULAR GO/C INSPECTION. ED AND REINSPECTED.	BOARDS HAS BEEN HADE A	PAST OF 1	HE REGUL	3 5	C INSPECTION	
	AUTOFILOT-SALARE-A/B PROGRAMER	98-04-124 67RO-DISPLACEMENT-8EARING	FAR 7-04250	\$00100	£18	4 Q	YES KEARFOTT NO	=
	FAILURE HODE-OUT OF TOLERANCE, REHOVED IZODG RPH HOMINAL SPEED DUE TO LACK OF	OF TOLERANCE, RENOVED FROM FIELD GYRO ASJEMBLY BECAUSE OF HIGH AUDIBLE NOISE, 6YRO SPEED MAS BELOW. SPEED DUE TO LACK OF LUBRICATION ON ONE SPIN NOTOR BEARING.	FROM FIELD GYRO ASJENBLY BECAUSE OF HIG Lubrication on one spin motor Bearing.	H ALGIBLE	MOI S.E	78 OE	FED WAS BELG	3
	CORRECTIVE ACTION- (1) KI	CORFECTIVE ACTION-(1) REARFOIT REVISED BEARING CLEANING PROCEDURE AND TIGHTENED QUALITY CONTROL. D D AND E SCRIES MISSILES WITH GYROG CONTAINING BARD CIRCUITS.	PROCEDURE AND TIGHTDE CUITS.	D QUALITY	CONTROL.	9	(g) 60/C RETROFITT	- 1
	AUTOFILOT-SQUARE-A/B	90-04-044 CAMI 8 TER	FAR 27-41001-867	740 401000	5	£ 0	5/95	00.7043
	FAILURE MODE-STRUCTURAL QUATING FEET, PROGRAMMER POLISMED AMAY.	FAILURE MODE-STRUCTURAL-DURING A ROUTINE INSPECTION. THE MISSILE A CRACK WAS DISCONDED IN THE CANISTER MOUSING M OUNTING FEET. PROGRAMMER WAS INSTALLED IN NEW CANISTER. CRACKS PROVED TO BE ONLY SURFACE HAIRLINE TYPE THAT COULD BE POLISHED ANAY.	THE MISSILE A CRACK WAS DISCOVERED IN THE CRACKS PROVED TO BE OMLY SURFACE HATRLINE	DISCOVERE Y BURFACE	D IN THE	# 1 T	CANIBIER MOUBING M TYPE THAT COULD BE	· # u
	CORRECTIVE ACTION-NUME.							
	autovilot - sauare - a/b Programeer	AE&Q-0&48/FC-5CO-03-000	COMPOSETE-FACTORY	3E 600924	FACTORY	88	5/O#	•
	PAILURE MODE-PREMATURE :	FAILURE MODE-PREMATURE GPERATION- PROGRADMER PITCH PROGRAM AND SUBROUTINE 3 FUNCTIONS OCCURRED EARLY. INVESTIGATION INDICATED 400 CPS HOUSE PICKUP AT THE GROUND SUPPORT EQUIPMENT DIGITAL CLOCK.	AH AND SUBROUTINE 3 PU	NCTIONS OF	CURRED E	ABLY.	14VE3716A710	· z
	SYSTEM EFFECT-IMPROPER	NYBIEM EFFECT-INFROMER AMALOG BIGMALS. PITCH PROGRAM AND BUBROUTINE B FUNCTIONS OCCURRED EARLY DUE	BUBROUTINE & FUNCTION	IS OCCURRED	כאורג פ	2 5	TO NOTAE PICKUP.	
1	VEHICLE EFFECT-COMPOSITY	VEHICLE EFFECT-COMPOSITE RESCHEDULED. REAUN OF COMPOSITE RESUIRED.	REGUIRED.		. !			
	CORRECTIVE ACTION-THE &	CORRECTIVE ACTION-THE GAE GAOUND 400 CPS PHASE A AND MISSILE 400 CPS PHASE A NERE SHIELDED TO CORRECT THIS CONDITIO 1.	BILE 400 CPS PHASE A 1	ERE MIELE	6 0 0	BRECT	THIS CONDIT	. 1
	autopilot-bauare-a/b programmer	98-04-120 8vro-displacement	FAR 27-41002-433	600983	E	÷ 3	y/9 ,	
1	FAILURE HODE-OUT OF TOLI OT BE CONFIRMED AT 8-8	OF TOLERANCE MILE PERFORMING YAN DISPLACEMENT SENSITIVITY CHECKS AT THE 6YRO LAB. FAILURE COULD M 7 8.D.	ACEMENT BENBITIVITY CO	ECKS AT TO	E STRO L	4	ALLURE COULD	2

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TAILUNE WORLELLY ACTION-MORE AT THE COMPOSENT MANY OF SET MANY AND THE DETERMINED. CORRECTIVE ACTION-MORE-CAUSE OF PAILUNE COALD NOT BE DETERMINED. ANTOFICI-SAUMER-AT CLOSS COALD TO BE DETERMINED. FAILUNE WORLE-ALL TO OPDATE AT MISCRIBED THAT - VEHIER EMAIN CUIOTF DISCRITE MAS NOT ISSUED BY PROCRAMMEN. FAILUNE WORLE-ALL TO OPDATE AT MISCRIBED THAT - VEHIER EMAIN CUIOTF DISCRITE MAS NOT ISSUED BY PROCRAMMEN. FAILUNE WORLE-ALL TO OPDATE AT MISCRIBED THAT - VEHIER EMAIN COUNTY DISCRITE MAS NOT ISSUED BY PROCRAMMEN. FAILUNE WORLE-ALL TO OPDATE AT MISCRIBED THAT - VEHIER EMAIN COUNTY DISCRITE MAS NOT ISSUED BY PROCRAMMEN. FAILUNE WORLE-ALL TO OPDATE AT MISCRIBED THAT - VEHIER EMAIN ENGINED. CORRECTIVE ACTION-REPLACED PROCRAMMEN. FAILUNE WORLE-AT THAT THAT IS NOT THAT THAT IS NOT THAT THAT THAT THAT THAT THAT THAT TH	***	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME) M.C.				r
ACCEPTANCE OF PAILLAGE COALD NOT BE DETENHIND. 1. CIRCULT BOADD	BYBTEN BAB-STRYEN	TESTARFORT NUMBER PAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	TIME DIF	TH VENDO	DR MANE R PART NO	
TO OPERATE AT PRESCRIBED TIME. WENNER ENGINE CUTOTY DISCRETE WAS NOT ISSUED BY PROGRAMMEN. FOURT DISCRETE SIGNALS. VERNIER ENGINE CUTOTY DISCRETE WAS NOT ISSUED BY PROGRAMMEN. FOURT DISCRETE SIGNALS. VERNIER ENGINE CUTOTY DISCRETE WAS NOT ISSUED BY PROGRAMMEN. FOURT DISCRETE SIGNALS. VERNIER ENGINE CUTOTY DISCRETE WAS NOT SENT TO PROPALSION BYTCH. BE-CALLES THE MATCH TO MODIFIED THAN STATIC TIRING THE PROGRAMMER FAILED TO PROVIDE PROPER PITCH AND ROLL PM BED ON LOW POMER BOARD MANAZE WAS VIBRATION SENSITIVE. BE STANDED TO VIBRATION TESTS. FOURTH TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FOURTH TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER DIOCE IN COLLECTOR CIRCUIT OF 43. FAR AGORDED TO WIRE TO SENER PAILLED TO MAINTAIN 1.48 VOLTS DURING STEP S OF THE PROGRAMMEN. FARE DURING OFFERALS—DESIRED PITCH PROGRAM WAS NOT ACCOMPLISHED.	CORRECTIVE ACTION-NOM	E-CAUSE OF FAILURE COULD NOT BE DET	CAMINED.					
TO OPERATE AT MESCRIBED TIME. VERNIER ENGINE CUTOFF DISCRETE NOT BENT TO PROPULATION STREETS MENDALE DISCRETE STEALLS. VERNIER ENGINE CUTOFF DISCRETE NOT BENT TO PROPULATION STREETS MENDALED PROGRAMMER. MENDALED PROGR	AUTOPILOT-BALARE-A/B	AE40-0448/FC-9CO-08-008	COMPOSITE-PACTORY	9.6		i o		******
PROBLIC DELAID. FOR COMPOSITE RETEATING REGUIND.	FAILURE MODE-FAIL TO C	DEGRATE AT PRESCRIBED TIME- VERNIER	ENGINE CUTOFF DIBCPE	TE MAS NOT	TABUED BY	PROGRAMMI TEN.	ż	
BE-CA-126 ERCULT BOARD-TRANSISTOR ED OURING OFERATIOH-DURING STATIC FIRING THE PROGRAMMER FAILED TO PROVIDE PROPER FITCH AND ROLL PR ED OURING OFERATIOH-DURING STATIC FIRING THE PROGRAMMER FAILED TO PROVIDE PROPER FITCH AND ROLL PR ES ON LOW POURR STATIC FIRING THE PROGRAMMER FAILED TO PROVIDE PROPER FITCH AND ROLL PR ES ON LOW POURR STATICH HAS REDESIGNED TO IMPROVE ITS TOLERAMEE OF VIBRATION ENVIRONMENTS. PUTURE P SHOOTS THAN STATICH HAS REDESIGNED TO IMPROVE ITS TOLERAMEE OF VIBRATION ENVIRONMENTS. PUTURE P SHOOTS AND SEMEN BLOODE IN COLLECTOR CIRCUIT OF 43. AC-40-0035/42-507-43-02 AC-40-0035/42-507-43	WONTELE EFFECT-COMPOSI	ITE DELAYED. POST COMPOSITE RETESTI	MG REAUTRED.					
ED DURING OPERATION-DURING STATIC FIRING THE PROGRAMMER FAILED TO PROVIDE PROPER FITCH AND ROLL PROGRAMME OPERATION-DURING STATIC FIRING THE PROGRAMMER FAILED TO PROVIDE PROPER FITCH AND ROLL PROGRAMMER OF STATION TERMS TO STATION TERMS TO STATION TERMS.	CORRECTIVE ACTION-REM	LACED PROGRAMMER.						
ED DURING OPERATION-DURING STATIC FIRING THE PROGRAMMER FAILED TO PROVIDE PROPER PITCH AND ROLL PR GETS ON LOW POLER BOARD ASABAE WAS VIBRATION SENSITIVE.	AUTOPILOT-SQUARE-A/B	Be-04-126 CIRCUIT BOARD-TRANSISTOR	7AR 27-41001-855	2E 600631	BYCANORE	7E3 60/C		:
THE HATTER TRANSISTOR HAS REDESIGNED TO HARNOWE ITS TOLERANCE OF VIBRATION ENVIRONMENTS. PUTURE P SHELECTED TO VIBRATION TESTS. BY THE CHECKED TO VIBRATION TESTS. THE CHECKLIT BOARD TRANSISTOR ET ALED TO ZENO POSITION WAS INCOMBISTENT OUR TO HIGH COLLECTOR VOLTAGE ON THE CHECKLIT BOARD TRANSISTOR CAPITOR WAS INCOMBISTENT OUR TO HIGH COLLECTOR VOLTAGE ON AC-80-0038/A8-507-A3-DE CAPITOR GAS. BY AC-80-0038/A8-507-A3-DE CAPITOR GAS. BY AC-80-0038/A8-507-A3-DE CAPITOR GAS. BY TO HIGH COLLECTOR CIRCUIT OF 43. BY TO HIGH COLLECTOR CIRCUIT OF 43. BY TO HIGH COLLECTOR VILLED TO HAINTAIN 1.48 VOLTA DURING SIEP S OF THE PITCH PROGRAM. HALFUNGTION IN THE 0.8 VOLT PLIP-PLOP BINARY IN THE PITCH PROGRAM PORTION OF THE PROGRAMMER. HOWELD HALFOLD SIGNALS DESIRED PITCH PROGRAM WAS NOT ACCOMPLISHED.	FAILURE MODE-FAILED DA	JAING OPERATICH-DURING STATIC FIRIN DN LOW FOMER BOARD ASARAR HAS VIBRA	6 THE PROGRAMMER FAILL TION SENSITIME.	01 02 PROVI	IDE PROPER	PITCH AN	D ROLL PR	
TIC OPERATIONMOMENTER PRAISEON FORTITION WAS INCOMESTENT DUE TO HIGH COLLECTOR VOLTAGE ON THE DUMBE TO ADD ZENER DIODE IN COLLECTOR CIRCUIT OF 43. AC-60-0038/AE-507-A3-DE CAPTIVE ZE SE SE YES SMITCH WALFUNCTION IN THE DITCH PROGRAMMER. HOPERATION- PROGRAMMER FAILED TO MAINTAIN 1.48 VOLTS DURING STEP S OF THE PITCH PROGRAMMER. HALFUNCTION IN THE D.8 VOLT PLICH PROGRAM WAS NOT ACCOMPLISHED. MAC. FACE DESIRED PITCH PROGRAM WAS NOT ACCOMPLISHED.	CORRECTIVE ACTION-THE RODUCTION AT 60/C SUBJE	MATSEA TRANSISTOR WAS REDESTGMED T	O IMPROVE ITS TOLERAM	E OF VIBA	TION CHVI	COMENTS.	PUTURE P	
TIC OPERATION-CROMANNERS RESET TO ZENO POSITION WAS INCONSISTENT DUE TO HIGH COLLECTOR WO SHARE TO ADD ZENER DIODE IN COLLECTOR CIRCUIT OF 93. B AC-60-0038/82-307-A3-DE CAPTIVE ZE NE YES SHITCH SHITCH SHITCH MALFUNCTION IN THE D.E VOLT PLIP-FLOP BINARY IN THE PITCH PROGRAM PORTION OF THE PROGRAM NOTES SHALLS DESIRED PITCH PROGRAM WAS NOT ACCOMPLISHED.	AUTOF 11 OT - BAUARE - A /B PROCKANHER	89-04-116 CIRCUIT BOARD TRANSISTOR	FAR E7-41001-867	760		75 60/C		
-CHANGE TO ADD ZEMER DIODE IN COLLECTOR CIRCUIT OF 43. AC-60-0038/82-507-A3-DE CAPTIVE EE SE YES NO SAITCH GOOSES NO NO SAITCH GOOSES NO NO SAITCH COPERATION- PROGRAMMER FAILED TO MAINTAIN 1.48 VOLTS DURING STEP S OF THE PROGRAM MALPUMCTION IN THE 0.8 VOLT PLIP-FLOP BINARY IN THE PITCH PROGRAM PORTION OF THE PROGRAM NOMES AMALOS SISNALS- DESIRED PITCH PROGRAM WAS NOT ACCOMPLISHED.	FAILURE MODE-GREATIC (OPERATION-PROGRAMMEN NEBET TO ZENO	POSITION NAS INCONSIS	TEMT OUR TO	H CQ.	LECTOR VO	LTASE 08	
B AC-60-0038/82-307-A3-DE CAPTIVE EE 38 YES SMITCH GOOSES NO MALFUNCTION IN THE D.S VOLT PLIP-FLOP SINARY IN THE PITCH PROGRAM PORTION OF THE PROGRAM NOMER ANALOS SISNALS- DESIRED PITCH PROGRAM HAS NOT ACCOMPLISHED.	CORRECTIVE ACTION-CHAP		CIRCUIT OF 45.					
FAILURE MOSE-FAILURE DURING OPERATION- PROGRAMMER FAILED TO MAINTAIN 1.46 VOLTS DURING STEP S OF THE PITCH PROGRAM, POSSIBLY DUE TO A MALFUMCTION IN THE D.S. VOLT PLIP-FLOP BINARY IN THE PITCH PROGRAM PORTION OF THE PROGRAMMER. SYSTEM EFFECT-IMPROPER ANALOG SISMALS- DESIRED PITCH PROGRAM MAS NOT ACCOMPLISHED. WENICLE EFFECT-NOME.	AUTOP1LOT-BAUARE-A/B	AC-60-0038/82-507-A3-02 8417CH	CAPTIVE	2E \$009E3		<u>ي</u> و		
	FAILURE MODE-FAILURE (POBBIBLY DUE TO A MAL)	DURING OPERATION- PROGRAMMER FAILED FUNCTION IN THE B.B VOLT PLIP-FLOP	TO HAINTAIN A.66 VOL. BINARY IN THE PITCH P	TE DURING NOCHAN POR	10 8 9 TH	THE PITCH	PROGRAM. Mer.	
	BYSTEN EFFECT-SHPROPES	R AMALOS SISMALS- DESIRED PITCH PRO	GRAN MAS HOT ACCOMPLE	MCD.				
PA64 0835	WENICLE EFFECT-NONE.				,			
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GENERAL DYNAMICS CONVAIR DIVISION

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SYSTEX SG-SYSTEX	TEXT/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	817E 71ME DIF	# E	VENDOR NAME	
CORRECTIVE ACTION-FAILURE	CORRECTIVE ACTION-FAILURE DID NOT RECUR DURING POST TEST CHECKS.	ECK 8.					01000
AUTOFILOT-SQUARE-A/B	AE60-0340/F1-404-00-66 CIRCUIT BOARD	riet.	660 600612	202.31	£ 6	YES GO COMVAIR	200273
FAILURE MODE-ELECTRICAL S RMCUT OF PROGRAMER PRINTE	ICAL SHORT, CAUSED BY 28 VOLT SHORT IN RETROROCKET WIRING AT RETROROCKET FIRING AND RESULTING BU PRINTED CIRCUIT BOARD STRILAR OCCURRENCE DURING RETROROCKET FIRING ON SAD.	ETROROCKET WIRING A DURING RETROROCKET	T RETROROC	KET FIRE 540.	¥	D RESULTING BU	
SYSTEM EFFECT-OPERATION S YCLING OF THE PROGRAMMER IN	SYSTEM EFFECT-OPERATION STOPS PREMATURELY. ALL RE VOLT DC POMER TO PROGRAMMER LOST WHEN CIRCUIT BOARD BURNED OUT. YCLING OF THE PROGRAMMER WITH A 24 SECOND PERIOD FOLLOMED THE POMER LOSS.	SHEN TO PROGRAMMER E POMER LOSS.	LOST WHEN	CIRCUIT	Da vo	BURNED OUT. C	
VEHICLE FFFECT-NOME ALL P	ALL PROGRAMER SMITCHING FUNCTIONS HAD BEEN ACCOMPLISHED PRIOR TO LOSS. CYCLING OF THE PROGRAMM THE VEHIER EMGINE TANES.	DEEN ACCOMPLIBHED P	#10# TO LG	68. CYCL	¥.	F THE PROGRAMM	
CORRECTIVE ACTION-CURRENT	CORRECTIVE ACTION-CURRENT LIMITERS LATER INSTALLED IN PYROTECHNIC CIRCUITS TO PROTECT PROGRAMMER.	CHHIC CIRCUITS TO	PROTECT PR	CCRAINER			
AUTOPILOT-SQUARE-A/B PROGRAPHER	96-04-111 RELAY	FAR 27-41001-871	3£ 600406	E3	ž Q		***************************************
FAILURE POE-ERRATIC OPER TO STICKING K-1 RELAY.	FAILURE HODE-ERRATIC OPERATION-INTERMITTANT ZERO POSITION INDICATION AND INTERMITTAN" MIGH POLER SWITCH OUTPUTS DUE TO STICKING K-1 RELAY.	IDICATION AND INTER	HITTAN" HE	er roles	T I'M	CH OUTPUTS DUE	
CORNECTIVE ACTION-MONE, A	AB THIR WAR FIRST REPORTED PAILURE.						
AUTOPILOT-SQUARE-A/B PROGRAMER	#8-04-094 CIRCUIT BOARD/TRANSLETER	FAR E7-41001-867	64D 600722	ETR	# Q		60700
FAILURE MODE-FAILED DURIN M INTERMITTENT TRANSISTOR	DURING CPERATION. DURING COUNTDOWN THE PROGRAMMER STOPPED AT SUBROUTINE E. FAILURE WAS DUE TO A ISTOR 85 ON THE VSABAI CIRCUIT BOARD.	MOGRAHOER STOPPED	AT SUBROUT		A154	E MAS DUE TO A	
CORRECTIVE ACTION-FIRST P	CORRECTIVE ACTION-FIRST FAILURE OF THIS TYPE, CAUSE UNKNOWN. PROGRAMMER TO BE MONITORED FOR RECURRENCE.	. PROGRAMMER TO BE	MONI TORED		RENC	ن	
autoptlot-bruare-a/b Programmer	AE60-0360/FC-3CO-01-08	COMPOSITE-FACTORY	66 600707		ž 3		
PAILURE MODE-PREMATURE OF M PROCEDURE TO OCCUR AT TAMBULLY SENT WEGO.	PAILURE MODE-PREMATURE OPERATION- PROCEDURAL ERROR PREVENTED VERNIER ENGINE CUTOFF FROM OCCURRING. VECO IS LISTED I I PROCEDUNE TO OCCUR AT TYESS SECONDS BUT PROGRAMMER RESETS AT TYESS SECONDS ON CAPTIVE MISSILES THERESY BLOCKING MA MALLY SENT VECO.	D VERNIER ENGINE CL AT T-288 BECCADS ON	CAPTIVE P	OCCURRIN I BRILES	7. 7.E.R.	CO IS LISTED I	
BYSTEM EFFECT-OPERATION D OGRANMER HAD RESET.	TIOM DOKE MOT START- VECO FUNCTIONS NOT STARTED DUK TO PROCEDURAL ERROR OF SENDING VECO AFTER PR	STARTED DUE TO PROC	EDURAL ERI	a S	Ž	VECO AFTER PR	

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		DITTICK TIES REVIEW	DINTICULARE REVIEW AUTOMICOT STREET AIRCOME	¥				
	STRIN SUB-BYRTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE DATE DIF	817E 11ME 01F	# 6 # 2	VENDOR NAME VENDOR PART NO	,
	VENICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE DELAYED. POST COMPOSITE TESTS RESUINED TO SHOW PROPER CPERATION OF VECO SUBROUTINE.	REQUIRED TO SHOW PROPE	R OPERATIO	OF VECC	9	OUTINE.	
	CORRECTIVE ACTION-NOT RHOMM.	HOM.						
	AUTOFILOT-SQUARE-A/B	HG-BG-D4-ERY CIRCUIT BOARD	FAR 27-45301-5	1000	:	ž õ		12 15 15 15 15 15 15 15 15 15 15 15 15 15
	FAILURE MODE-FAIL DURING MODE FAIL DURING MOD AFTER A RESTART, THE	DURING OPERATICAL, THE PROGRAMMER ADVANCED TO VCO WHEN A STOP WAS INITIATED. APPROXIMATELY 1D BECO.	ANCED TO VCO WHEN A STO. TIME.	T 191	1A1CD. AF	TROM.	MATELY 10 MECO	
	CORRECTIVE ACTION-THE D LE MALIVIERATOR CIRCUIT IS STOPPED, PROGRAMMERS	CORRECTIVE ACTION-THE DIGITAL DEVICES GROWP HAS INITIATED ECP-1113 TO HOVE THE STOP LINE ANAY FROM THE WCO HOWOSTAB Le ballivibrator circuit to preclude the possibility of a glitch voltage triggering the wco maenever the programmer Is stopped, programmers produced after 3 march 1981 are affected by This Change.	TED ECP-1113 TO NOVE TO A GLITCH VOLTAGE TRIGG APPECTED BY THIS CHANG	E STOP LIN	E AMAY FR	90 V	E VCO HONOSTABI HE PROGRAMMER	
	AUTOFILOT-SQUARE-A/B	96-04-079 8477CH	Fait 27-41001-667	600823	FACTORY	3 €		12.
	FAILURE MODE-ELECTRICAL LAY KS WAS BURNED OPEN.	FAILURE MODE-ELECTRICAL OPEN, DIRING ENGINEERING EVALUATION TEST SW 11 GAVE NO INDICATION, MOVABLE LAY KS HAS BURNED OPEN, BELIEVED TO BE CAUSED BY MISAPPLICATION OF ENCESSIVE VOLTAGE PRIOR TO TEST. CAUSTOTIVE ACTION—MOME-SOURCE OF NIGH VOLTAGE COULD NOT BE DETERMINED.	ATION TEST SW 13 GAVE N LICATION OF EXCESSIVE V T BE DETERMINED.	OLTAGE PRIN	N. HOVAE	3 1	NO INDICATION. MOVABLE CONTACT 10 OF REVOLTIGE PRIOR TO TEST.	
	AUTOPILOT-SGUARE-A/B	AUGO-0321/P1-401-00-54 EBUCC PROGRAMMEN FILTER	Alent	54D \$00\$11	11 257.38	2 2		****
	FAILURE MODE-ERRATIC OPERATION. FIRING TH AULED THE ZANDE PROGRAMMER FILTER TO RING.	iui	RE-ENTRY VEHICLE JETTISON AND UMBILICAL EJECT SAUIBS AT 237.55 SECONDS C	רוכאר בזבכ	en local	¥	7.85 SECONDS C	
	SYSTEM EFFECT-THPROPER LABOURD THE PROGRAMMER TO BE TON. RETROSCRETS MERE F.	SYSTEM EFFECT-INFROMER DISCREVE SIGNALS. RINGING IN THE FILTER CAUSED INTERNAL FORCE SUPPLY VOLTAGES TO RING AND CA USED THE PROGRAMMER TO BE ADVANCED TO A EDD COUNT (STAGING DISCRETE) CONDITION AND SO BYPASSED THE RETROROGRET FUNCT TON. RETROROGRETS MERE FIRED LATE, AT 473.24 SECONDS.	E FILTER CAUSED INTERMINE DISCRETE! COMDITION	L POMER SU	71.7 YOL 7 7453ED TH	7,000 M	TO RING AND CA	
1	VEHICLE EFFECT-COMMAND	VEHICLE EFFECT-COMMAND NOT BENT, RETRO-ROCKETS FIRED EFS.E4 SECONDS LAYE.	73.E4 SECONDS LAYE.					······································
	CORRECTIVE ACTION-AN EM	CORRECTIVE ACTION-AN ENHANCED BO VOC PROGRAMMER FILTER WITH BUILT IN DANFING WAS PLANNED FOR BUBBEGUENT AIG MISSILE	WITH BUILT IN DAMPING	MAS PLAIBLE	FOR BUE	30.00	MT AIG MISSILE	
		THE RESERVE THE PROPERTY OF TH			.		PAGE 0237	-1

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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PRI VENDOR NAME OTH VENDOR PART NO		5 42.			COMDS.				0008 TER				ACTIVA			-
VENDOR NAME		and so		3/03	0 27 SE			3/0 5	AWEA 1				HITIAL MCE.			L
1 1 1	99	BECOM	:	7E8 60/C	15 AN O 03TA			33	7			₽ £	PACITA			
317E	:: ::	AT 478 6.	÷	FACTORY	DETNEEN DUPLIC	1691.		YACTORY	RME A/P			FACTORY	ONTLY A			
VEHICLE SITE	34D C0C611	FAILURE MODE-FAIL DURING OPERATION, A PRINTED CIRCUIT BOARD IN THE PROCRAMER BURNED OUT AT 478 SECONDS DUE TO LARGE SURGE OF CURRENT THROUGH THE BOARD, POSSIBLY CAUSED BY A SHORT IN THE RETROPOCKET WIRING.	WHICLE EFFECT-MOME, THESE EVENTS OCCURRED AFTER THE PERIOD OF AUTOFILOT USE IN THE FLIGHT.	0190	FAILURE MODE-FAIL DURING OPERATION- THE BINARY COUNTER IN THE FLIGHT PROGRAMMER STOPPED BETWEEN 15 AND 27 SECONDS: THE EXACT CAUSE FOR THIS CONDITION COLALD NOT BE DETERMINED, MOR COLL.D THE SAME PROBLEM BE DUPLICATED DURING EXTENSIVE.	STRICH EFFECT-ERRATIC OPERATION- FLIGHT PROGRAMMER STGPPED FOR 12 LECONDS AT 7415 DURING TEST. WHICH FFFET-COMPASITE RESCHEDALD, BERIN OF COMPOSITE MADE.		1380	FAILURE MODE-ERRATIC OPERATION- VOLTAGE TRANSIENTS IN GROUND DE SUPPLY RESULTED IN AIRBORNE A/P PROGRAMMER BOOSTER Ettison skitch actuations.			4E 6003£7	FAILUNE MODE-FAIL DURING CPERATION-THE PROGRAMMER BOOSTER JETTISON BWITCH DEACTIVATED SMONTLY AFTER INITIAL ACTIVATION. THIS HAS BEEN ATTRIBUTED TO WOLTAGE TRANSIENTS IN THE GROUND DC SUPPLY AND TEST SET LINE CAPACITANCE.	A1108.	LAURCH.	
	*3	THOROCKI	. H. 1963	1	RAMER PA	AT T41			BK.789				DEACT!	STSTEM EFFECT-OPERATION STOPS PREMATURELY-SMITCH DEACTIVATES SHORTLY AFTER ACTIVATION	WENICLE EFFECT-COMPOSITE DELAYED- CORRECTIVE ACTION TO BE ACCOMPLISHED PRIOR TO LAUMCH.	
DIT DATA BOURCE PART NUMBER		PROCEA THE RE	OFILOT	COMPOSTTE-FACTORY	An The	RCOID 3		COMPOST TE-FACTORY	PP.			COMPOSITE-FACTORY	S SWITCH	ILY APTE	E- 0344	
110	7.19	THE THE	0 4 M	COMPO	THE PLIS	70 70 12 56.		CO##00	¥ 20 9		VENICLE EFFECT-COMPOSITE DELAYED. POST COMPOSITE TESTING REQUIRED. CORRECTIVE ACTION-NOT KNOWN.	COMPO	JETTISON GROUND D	ES SHORT	ACCOMPL 1	
		IT BOARS	E PERIO		TER IN	STRICH EFFECT-ERRATIC OPERATION- PLIGHT PROGRAMMER SIGPPED FOR WHICE FFFFT-COMPOSITE RESONEDD, REPLAN OF COMPOSITE MADE.			IN GOOD		***************************************		COSTER .	ACTI VA TI	10 86 4	
TEST/REPORT NUMBER FAILED COMPONENT NAME	- 54 BOARD	CIRCU	7 TER 14	\$0-	RY COUN	RAINEER OF COMP		\$	BICHT.		31 TE 16	40	APPER D.	TCH DE	AC710N	
TEST/REPORT NUMBER	AESO-0321/P1-401-00-54 PROGRAMMEN CINCUIT BOARD	PRINTE		AE60-0392/FC-5CO-01-05	#E BINA	HT PROG		AE80-0381/PC-5CO-01-04	GE TRAN	:	2 8 8	AE60-0391/FC-5CO-01-04 SAITCH 11/ELECTRONIC	E PROGR.	RELY-SW	RECTIVE	
FAILED	381/91	TON. A	300 81	392/FC	104 COL	+ F.16		391/70	. WOLTA	#151#	8 4	1391/FC	1104-TH	WENA TU	- CO	
	AESO-O	OPERAT	ERATION SEE EVEN	AE 60-0	IL DIRING OPERATION- THE FOR THIS CONDITION COLAD	ERATIO BESCHE	į	AE80-C	3A11OF	BYBIEN EFFECT-IMPROPER DISCRETE BIGHALB.	DELAM	AE 60-0	CPERAS UTED TO	1001	DELAYE	
		DUR 1 NG THEOUGH	7 . T		DIRITE 7 7413	ATIC OF	CORRECTIVE ACTION-NOT KNOWN.		LATIC OPERA	ROPER D	VENICLE EFFECT-COMPOSITE DEL CORRECTIVE ACTION-NOT KNOMA:		DURING ATTRIB	14 T I OM	31 1904	
818-81EH	AUTOFILOT-SQUARE-A/B	E-FAIL	ECT-109	CORRECTIVE ACTION-NOIS, AUTOPILOT-SQUARE-A/B	K-FAIL	CT-ERR.	ACT104	AUTOFILOT-SQUARE-A/B	E-ERRA	CT-13	ECT-CQ ACTION	autofilot-square-a/B Programmer	E-FAIL	CY-OPE	ECT-CO	
1.93	01-38U	FAILURE MODE-FAI	WHICLE EFFECT-1	OT - 8 au	FAILURE MOE-FAI PRE EXACT CAUSE F TESTING.	EN OFFE	ECTIVE	LOT-841	PATLUNE MODE-ERR	E CM	כר ב ברי	LOT-34.	FAILURE MODE-FAI	IN EFFE	ורב בנג	
	AUTOPILOT-	FAIL F BUR	i g	AUTOPILOT- PROGRAINGER	FAILURE N THE EXACT E TESTING.	878 11874	8	AUTOFILOT -	ratul JETTIS	878 H	10 K	AUTOFILOT-	7431.	11 4 7 4	že ž	

	FAILED COMPONENT NAME	PART NUMBER	DATE DIF	11M 014	TIME BIF OTH VENDOR PART HO	
CORRECTIVE ACTION-CORREC	-CORRECTIVE ACTION TO BE ACCOMPLIBHED PRICA	ICA TO MISSILK LAUMCH.				
AUTOFILOT-SAUARE-A/B	AASO-DDSS/PL-4CO-DL-84 AUTOFILOT PROGRAMMER BUITCH NO.E	COMPOSITE» J FACT	940 \$00527	11	YE 8 NO	
FAILURE MODE-FAIL DURING DROPPED OUT DUE TO A 40 W	DURING OPERATICM. BURING COMPOSITE TEST, BOOSTER ENGINES DID NOT MALL AT BECO. PROGRAMMER SMITCM A 40 WOLT INDUCTIVE SURGE WHEN BOOSTER PROPELLANT VALVES CLOSED.	, BOOSTER ENGINES DID PROPELLANT VALVES CLO	NOT HALL.	N7 BECO. 1	MOCRAHMER SUIT	
SYSTEM EFFECT-OFFERATION STOPS THE MOT MALL AT THE PRESCRIBED TIME.	STOPS TOO EARLY. PROGRAMMEN SMITCH MAS DEACTIVATED BY A VOLTAGE SURGE. SCOSTER EMGIMES DID INC.	H MAS DEACTIVATED BY	A WOLTAGE	NUMBER: BOX	DATER CHGINES (2
WHICLE EFFECT-COMPOSITE DELATED.	E DELATED.					
CORRECTIVE ACTION-A FILT	CORRECTIVE ACTION-A FILTER MAS ADDED TO THE DC INPUT OF THE PROGRAMER TO DAMPEN VOLTAGE SURGES. RERUN OF TEST MAS	НЕ РРОСЛАНИЕЛ ТО ВАИТ	EN VOLTAGE	sunces.	RERUN OF TEST 1	:
AUTOPILOT-SALARE-A/B	98-04-073 3MI TCH-ARM/3AFE	FAR 27-41001-887	400517	£1.3	3 Q	******
CORRECTIVE ACTION-REMOTE	E SET REDESTAND.					
AUTOFILOT - SAURE - A/P PROGRAMER	AEHO-0343/FC-5CO-02-03 BAITCH-NI FONER ELECTRONIC	COMPOSITE-FACTORY	3£ 600426	FACTORY	7E3	
FAILURE MODE-ESRATIC OPE THIS SMITCH DEACTIVATED A ED DURING SYSTEK TESTING.	FAILURE HODE-EPRATIC OPERATION-A VOLTAGE TRANCIENT CAUSED DEACTIVATICM OF A HIGH POWER BWITCH (BOÓDTER) JETTISON). THIS SMITCH DEACTIVATED APPROX. 1.4 SECONDS AFTER INITIAL ACTIVATION FOR A DURATION OF D.8 SECONDS. THIS ALSO OCCURR ED DURING SYSTEK TESTING.	DEACTIVATION OF A MI ACTIVATION FOR A DURA	EH POLER B	ATTCH (BO)	SATER) JETTIBON	. .
STRIEN EFFECT-NONE.						
VEHICLE EFFECT-COMPOSITE DELAYED.	C DELAYED.					
CORRECTIVE ACTION-UNKNOW	CORRECTIVE ACTION-UNKNOWN-PROBLEM WAS TO BE CORRECTED IN FIELD PRIOR TO FLIGHT.	PIELD PRIOR TO PLICAT	•			
AUTOFILOT-SAUARE-A/B	98-04-041 8MITCH	7AR 7-41011-983	6 004£7	£78	YE4 HO	
FAILURE MODE-FAILED TO O	FAILUME MOCE-FAILED TO OPCRATE AT PRESCRIBED TIME-PROGRAMMER GAVE NO INDICATION OF ZERO POSITION AT END OF PROGRAMM R RUM. CAM EET BREWS IN ZERO POSITION WERE LOCUE. BYZICHES 101, 101, 101, AND 108 DID HOT PUNCTION.	HER SAVE NO INDICATIO 8 101: 108: 107: AND	N OF ZERO	POSITION /	17 SHD OF PROGE	# ·

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	19 1 1944	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBON	¥				ſ
	3121EX 818-8181EX	TEATZREPORT JUNESA FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF TI	TIME DIF	PRI VENDOR	PRI VENDOR NAME OTH VENDOR PART NO	
	CORRECTIVE ACTION-BUB-AS	CORRECTIVE ACTION-SUB-ASSEMBLY BUALITY CONTROL INSPECTION INTENSIFIED.	INTENSIFIED.					•
	AUTOFILOT-SQUARE-A/B PROGRAMMER	5904069	FAR 27-41001-853	440 600404		YE\$ 50/C		887902
	PAILURE MODE-ERRATIC OF E15 SECONDS. THE ITEM THE	FAILURE MODE-ERRATIC OPERATION-DURING THE GUIDANCE INTEGRATED PROCEDURE THE PROGRAMMEP OPERATED MORMALLY TO T PLUS RIS SECONDS. THE ITEM THEN ABMORNALLY RESET TO ZERO TIME, FAILURE COULD NOT BE REPEATED.	SED PROCEDURE THE PRAILURE COULD NOT BE	OCRAHNEP OPE REPEATED.	RATED NO	RMALLY TO	1 7.4	
	CORRECTIVE ACTION-NOME-	CORRECTIVE ACTION-WOME-FAILURE COALD NOT BE TRACED TO AMY PROCRAMMER COMPONENT.	PROGRAMMER COMPONENT	•				
	AUTOFILOT-SQUARE-A/B	WB-04-03E SAI TCH-ARM/BAFE	FAR 27-41001-645	420 ETR \$00223		7E.9		:
	FAILURE MODE-FAIL GURING E POSITION.	DURING OMERATICH-DURING BYSTEMS CHECKGUT POMER CHANGEOWER SMITCH WOLLD NOT SMITCH FROM ARN TO SAF	POMER CHANGEOVER BY	ATCH WOLLD	OT SMITC	H FROM A	10 EAF	
	CORRECTIVE ACTION-D SCR	CORRECTIVE ACTION-D SERIES REMOTE SET WAS REPLACED BY E SERIES REMOTE SET.	RIES REMOTE SET.					
	AUTOFILOT - SQUERE - A/B	98-04-041 RESISTOR	FAR 27-41001-845	600200 ETR		ž č		50000
	FAILURE MODE-OUT OF TOLE T DROPFING OUT DUE TO BIA	OF TOLERANCE. RESET TIME WAS IN EXCESS OF THE TWO SECOND SPECIFICATION LIMIT. RESET RELAYS WERE NO. TO BIAS VOLTAGES REMAINING. RESISTOR VALUES TOO LOM.	THE TWO SECOND SPEC UES TOO LOM:	PICATION LI	HIT. RES	ET RELAY!	LERE NO	
	CORRECTIVE ACTION-BASE &	CORNECTIVE ACTION-BASE SIAS CIRCUITS OF THE HIGH POLER A ASSENBLY RAISED TO ETK AND 100 K OHMS.	SSEMBLY RAISED TO ET	K AND 100 K	OHKS.			
	AUTOFILOT-69UARE-A/B PROGRAMBER	98-G4-D35 Transistor	FAR E7-41001-845	425 ETR 400200		9 9 9 9		
	FAILURE HODE-FAIL TO CEA NO TIME LIGHT WOULD NOT S HTROL ZEAD LIGHT DREW BOD	FAILURE HODE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME-DURING TEST CYCLING OF THE PROGRAMMEN THE LAUNCH CONTROL ZE No time light monlo mot go off. Pailure has traced to the Glo transister on the High Pomer a assembly. The Launch co Htrol zero light drew God ma shorteng the 100 ma transistor.	RING TEST CYCLING OF LO TRANSISTER ON THE	THE PROGRAM	4 ABEN	LAUNCH CO	MTROL ZE AUNCH CO	
R	CORRECTIVE ACTION-LAUNCH	CORRECTIVE ACTION-LAVACH CONTROL EQUIPMENT HAS BEEN HOUIFIED TO INCLUDE A RELAY THAT WILL BE PULLED IN BY THE ZERO TIME TRANSISTOR. THIS RELAY WILL REEP THE LOAD ON THE TRANSISTOR WITHIN SAFE LINITS.	ED TO INCLUDE A RELA LATOR WITHIN BAPE LI	Y THAT WILL MITS.	DE PULLE	*	HE ZERO	
							PASE 0240	

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AUTOPLICI-BUILDE APPEARENT TELLEGE CONCRETE WANTER THAT HANGES TO THE THE THE THE TOTAL STATES AND CONCRETED AND C	TELLARCORT NUMBER TALLED CONTOURNELS TALLED TO CONTOURNELS THE TALLED TO CONTOURNELS TAL	SYSTEM SUST-SEURE-A/S AUTOFILOT-SEURE-A/S FROGRAMER FAILURE MODE-ELECTRICAL SHORT. PRESSURIZING CORRECTIVE ACTION-LAUNCH CONTROL EQUIPHE REFLACE 4.5 K RESISTERS MITH ETK AND 100 AUTOFILOT-SQUARE-A/S PROGRAMMER CIRCUIT BOAND/R CIRCUIT BOAND/R CIRCUIT BOAND/R	TRANSISTOR TRANSISTOR TO CONTINOUSLY, SIG TR TO CONTINOUSLY TO CONTINUE TO CONTINU	DIF DATA SOURCE PART NUMBER FAR E7-41001-845 INDSE COME EJECT 8 ANSISTER MAS BURNE DE RELAY IN ZERO Y FAR E7-41002-809 TEST DID NOT 61VE TEST DID NOT 61VE TEST DID NOT 61VE	420 420 420 420 420 420 420 420	ETR COLF OF THE COLF OF THE COLF OF THE COCRAINSEN	TERMON PANT TH WENDON PANT TO 60/C TO BURING SYSTEM O RESET CIRCUIT. TES 60/C TO A RT ONM RESIS	
ANTORIOT-BARREA AS SECRETAR SECRETARIA SECRE	ANTORIOT-BANKE-A/A NE-GA-OF PRINSIPRON PRINSIPRON PRINSIPRON PROMISE AND CONTROL OF ANTONIO PROGRAMMEN AND PROGRAMMEN PROGRAMMEN AND PROGRAMMEN	AUTOFILOT-BEUAKE-A/B 98-04-047 PROGRAMER CIRCUIT BOARD TI FAILURE MODE-ELECTRICAL SHORT, PRESSURIZI CROSS. THE ZERO RESET LIENT ALSO OPERATED CORRECTIVE ACTION-LAUNCH CONTROL EQUIPME REPLACE 4.5 K RESISTERS MITH ETK AND 100 AUTOFILOT-SQUARE-A/B 98-04-04E PROGRAMMER CIRCUIT BOARD/R	TRANSTROCK TO CONTINUATE TANK AND TO CONTINUALY, 410 TR THE PROPERTY AT TRANSTROCK TO WE STATIC GAINS F A 300 ONE RESIROR. FECTION AND CONTINUES	PAR RT-41001-845 I NOSE COME EJECT & IANSIBTER WAS BURNE DE RELAY IN ZERO Y PAR E7-4100E-809 TEST DID NOT 61 WE TEST DID NOT 61 WE FAR	420 400 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E HIBSING ROGRAMER T. PROGRAMER RESPONSE	OURING SYSTEM C RESET CIRCUIT. PER REDESIGNED TES GO/C	
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	araien .da-nraten	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	817E 110E DIF	PR I	VENDOR NAME	
	AUTOFILOT - SQUANE-A/B PROGRAMMER	A-89-04-3394F RELAT	F1.2 46-73900-067	01110	FACTORY	YES UNIT	YES INION SMITCH A NO MO SIGNAL RSSHLPGS	:
	FAICURE MODE-FAIL DURING E MAS CONFTRED. THE ERAC TURE, HOT ELECTRICAL, TH	FAICURE MODE-FAIL DURING OPERATION-DURING MARCFECTURING TESTS THE RELAY REPORTEDLY HAD STICKY OPERATION. THE FAILUR E WAS CONFIRMED. THE EXACT CAUSE WAS NOT DETERBURD. HOMEVER! IT WAE ASCERTAINED THAT THE FAULT WAS MECHANICAL IN MA TURE, HOT ELECTRICAL. THE MORMALLY OPEM CONTACTS HOULD NOT CLOSE EXCEPT WHEN THE RELAY WAS TAPPED.	TS THE RELAY REPORT IN IT HAS ASCENTAINE LOSE EXCEPT WHEN THE	EDLY HAD B D THAT THE E RELAY WA	FAULT WE	RATTON.	THE FAILUR NICAL IN NA	
	CORRECTIVE ACTION-NO COI	CORFECTIVE ACTION-NO CORRECTIVE ACTION COULD BE TAKEN BECAUSE THE EXACT CAUSE OF FAILURE MAS NOT DETERMINED. THE WE DOR WAS INFORMED OF THE RESULTS OF THE FAILURE AMALYSIS. REF. RAR A-88-04-3628 IMFO.	SE THE EXACT CAUSE :	OF FAILURE INFO.	MAS NOT	DETERMI	MED. THE WE	
	AUTOPILOT-SQUARE-A/B	AE60-1007/FC-4CO-02-090	COMPOST TE-PACTORY	900	FACTORY	7ES 60/C	u	£2£444
	FALLURE MODE-PREMATURE (TESTING) SUSTAINER CUTOF	FAILURE HODE-PRENATURE CPERATION-FLIGHT PROGRAMMER CYCLED FABTER THAN MORMAL. CAUSE UMKNOMN. DURING FOST-COMPOSITE ESTING, SUSTAINER CUTOFF SMITCH FAILED TO STAY ACTIVATED. THIS MAS CAUSED BY AN OPEN CONDITION IN THE LOGIC BOARD.	ASTER THAN MORMAL. HIS WAS CAUSED BY A	CAUSE UNKN N OPEN CO	O.M. BURE	THE LO	-comosite	
	SYSTEM EFFECT-IM-ROPER DISCRETE SIGNALS. VEHICLE EFFECT-COUNTDOMN, COMPOSITE DELA	SYSTEM EFFECY-IM-ROMEN DISCRETE SIGNALS. VEHICLE EFFECT-COMPTIONAL COMPOSITE DELAYED OR RE-SCHEDULED. SYSTEMS LEWEL AND COMPOSITE RETESTING REGUIRED.	. BYRTEMS LEVEL AND	COMPOSITE	RETESTIN	C REGUI	Ġ.	
	CORRECTIVE ACTION-PROGRAMMER REPLACED.	AMER REPLACED.						
	AUTOFILOT-SQUARE-A/B	A-9M-04-3249-F	FAR R7-45601-5	2	SCHILLIN HO	5/03 04 04	U	89410£
	FAILURE MODE-PREMATURE OPERA MAS FOUND IN THE PROGRAMMER.	FAILURE HODE-PREMATURE OPERATION-PROGRAMMER ARMED TURNED AMEER 5 SECONDS AFTER COMMIT BUTTON PUSHED. NO MALFUNCTION MAS FOUND 1M THE PROGRAMMER.	RER S SECONDS AFTER	COMIT BU	TTON PUSH	g ė	MALF JANCT TON	
	CORRECTIVE ACTION-UNKNOWN.	7				er and an angelook plan in a series between		
	AUTOFILOT-BQUARE-A/B GYRO PACKAGE	A-90-04-5022-F SMRD DIODE-CR-1	FAR 27-75041-1	1430	5	ž č		****
	FAILURE MOE-OUT OF TOLI OMED FAILURE WAS DUE TO 1 TO THIS MAME BEEN AMALT?	FAILURE MOE-OUT OF TOLERANCE. THE GYRO PKG WAS IR/D WHEN THE SHRD OUTPUT WENT TO ZERO. FAILURE AMALYSIS TESTING SH OMED FAILURE WAS DUE TO A TEMPERATURE SENSITIVE SUBASSEMBLY I IP/N E7-45189-3) TWENTY FIVE OTHER FAILURES IDENTICAL TO THIS HAVE BEEN AMALYTED, REF. LV-99-06-4606,-46007,-4610, 4634,-4713,-474?-4732 AND A-80-04-4743 AND -4779.	HE SWED CUTPUT MENT 1 IP/N RT-45169-53 4654-4755-475'-4	TO ZERO. THENTY FIX	FAILURE A E OTHER F 99-04-474	MALYSIS AJLUNES A AND -	S TESTING SM IS IDENTICAL -4779.	
1	CORRECTIVE ACTION-ECP TO	CORRECTIVE ACTION-ECP 7838 TO CHANGE DICORE CR-1 AND CR-8 WAS DISAPPROVED BY CUSTONER, NO FURTHER ACTION.	ME DIBAPPROVED BY C	USTONER. P	D FURTHER	ACT10#		
								_

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

L	3737EH 3UB-3737EH	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 71ME DIF	PRI VENDOR OTH VENDOR	VENDOR MANE	
1 < 0	AUTOPILOT-SQUIRE-A/B BTRO PACKAGE	LV-98-04-5016-F	FAN E7-41002-058	L50416	ETA	2/ 9 3 QH		***
	FAILURE MOE-OUT OF TOLERANCE. ALLONED 18 0.740. FAILURE TRACI	FAILURE MODE-OUT OF TOLERANCE, GYRO PKG MAS IR/D FOR LOW 2-YOLT CCW PITCH ALLORED IS 0.740. FAILURE TRACED TO BAD GROUND CONNECTION IN THE ETR TEST CORRECTIVE ACTION-BAD GROUND CONNECTION WAS REPAIRED.		RAH BLAVII	₩ READOUT	Ø 0.73	PROGRAM BLAVING READOUT OF 0.732. MIMIMUM BET.	
< 9	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	69A3321 DISPLACEMENT GYRO	UTP-PET 7-04230-001	035099	3/05	YES REARFOTT NO C-70-250	KEARFOTT C-70-2506-001	3 020 6 0
	FAILURE MODE-FAIL DURING OPERATION - DURING ATION. THE STICTION LASTED FOR APPROXIMATELY	ATION - DURING APPROXIMATELY	POST TEMPERATURE TEST PROOF CYCLE C, STICTION OCCURRED IN	C, STICTION DA RANDO	STICTION OCCURRED IN THE A RANDON OCCURRENCE.	D IN THE	SA CREENT	
	CORRECTIVE ACTION-TESTING COMI AND ALL OTHER REQUIREMENTS ARE CTCTH NO. 551-1-020	TINGO THROUGH COMPLETION IN SPECIFICATION LIMITS.	OF PET LOT 8 TEST SATISFACTORILY. LOT NUMBER 48 IS THEREFORE ACCEPTE	PACTORILY ORE ACCEP	. STICTION	STICTION WAS NOT ID FOR PRODUCTION	REPEATED USE. REF	
	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	69A5315.1 RATE GYRO	UTP-PET 27-04374-5	660517	9	TES HONE NO JRS1	HONETVELL JRS101A3	8802 98
······································	FAILURE MODE-OUT OF TOLERANCE-DURING SPECIAL 49 MV WHERE SSMV IS ALLOWED. CAUSE UNKNOWN.	FAILURE MODE-OUT OF TOLERANCE-DURING SPECIAL PET SCREENING TESTS, ONE UNIT HAD OUT OF TOLERANCE MULL SMIFT VALUE OF 49 NY WHERE SSNY IS ALLONED. CAUSE UNKNOMM.	TESTS, CHE UNIT HAD	out of t	OLERANCE	WLL SHIF	T VALUE OF	
······	CORRECTIVE ACTION-UNIT WAS REJ	MAS REJECTED AND RETURNED TO VENDOR FOR FAILURE INVESTIGATION. REF.	FOR FAILURE INVESTI	GATION. R	EF. CTCTH NO.		551-1-019	
<u> </u>	AUTOPILOT-SQUARE-A/B GYRO PAC.:AGE	BLV-A9-04-5131F AUTOFILOT PACKAGE	FAR 69-42002-6	58-02 660511	FACTORY	7E8 60/C		90454
	FAILURE MODE-ERRATIC OPERATION ER BIBCREPANCY, EXACT MAG, AMP	ERATION DUE TO FINE HEATER VOLTAGE FLUCTUATION. 6. AMP FAILURE UNKNOWN, SINCE THE FAILURE CAUSE	FLUCTUATION. FAILURE AILURE CAUSE CORRECT	FAILURE UNS ATTRI CORRECTED ITSELF.	IBUTED TO	A MACK	FAILURE UNS ATTRIBUTED TO A MACHETIC AMPLIFI.	
	CORRECTIVE ACTION-MONE BINCE	SINCE THE EXACT CAUSE WAS UNDETERNINED.	ÆD.					
								
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	18 10% 1886	GREGORIA-MOTORY TO INCOME.	VELOT BYSTER-AIRBOR	¥			•	
	BYSTER BUB-BYSTER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOMECE	VEHICLE DATE DIF	\$17E 71ME 01F	# O	VENDOR HAME VENDOR PART NO	
	AUTOFILOT-SQUARE-A/6 GTRO PACKAGE	SOCCESS SWITCH, ACCELEROMETER	UTP-PET R7-04090-017	660302,1 60/C 1	3/09	¥ O	LDCL1FF 100002-83	**04.5
	FAILURE MOE-OUT OF TOLE 6 SUCCESSIVELY, AFTER SOS E IS UNKNOWN BUT TEST MET	ZAILURE MODE-OUT OF TOLERANCE, AFTER 400 HOURS LIFE TEST, THE INPUT TRIGGERING LEVELS MERE 4.4546, 6.4666 ANJ 6.874 6 siccessively, after soc hours of Life Test, the imput Level has 8.8856. The maximum specified level is 6.846. Caus E is unknown but test method is suspecize as being. Improper.	HE INPUT TRIGGERING IL MA 8.8856. THE M	LEVELS NE AXINUM SPE	RE 4.454 CIFIED L		5666 AND 6.674 19 6.640. CAUS	
	CORRECTIVE ACTION-TEST 3 M STANDARDS LAB AND ALSO ANTIATE NO DISCREPANCY. E	CORRECTIVE ACTION-TEST SPECINEN RETURNED TO VENDOR BUT DISCREPANCY MAS UNCOMFIRMED. SPECINEM MAS RETESTED AT 60/C I M STANDARDS LAB AND ALSO IN ORIGINAL TEST LAB, THE DISCREPANCY DID NOT REPEAT. FURTHER TESTS ARE IN PROCESS TO SUBST ANTIATE NO DISCREPANCY. ELD IS 86-07-10, REF. CTCTH NO. 551-1-01? AND 016.	REPANCY NAS UNCONFIL NY DID NOT REPEAT. 1-017 AND GIB.	RHED. SPEC FURTHER TE	THEN MAS	N PR	XESS TO SUBST	
	AUTOFILOT-SQUARE-A/B	SLY-98-D4-5123 GYRO PACKAGE	FAX 69-42002-587	5601 660426	ET#/12	ă õ	5/9	2473
	FAILURE MODE-ERRATIC OPE MOT COMFIGNED BY FAILURE COMMETTING ACTION-MOT COM	FAILURE MODE-ERRATIC OPERATION, UNIT WAS REJECTED FOR MOISY POLL SIGNAL AMPLIFIER OUTPUT, THE REPORTED FAILURE MAS NOT CONFIGHED BY FAILURE ANALYSIS. CORDECTIVE ACTION-AND CORRECTIVE ACTION CAN BE TAKEN BECAUSE THE FAILURE REPORTED COULD NOT BE CONFIRMED.	FOLL BIGNAL AMPLIF	IER OUTPUT	. THE RE OT BE CO	MORTEL MF 1RM	PAILURE MAS	
	AUTOPILOT-SSUAME-A/B GYRO PACKAGE	69CSD05 TWN RATE GYROGCOPE ASSEMBLY	UTP-PAT 69-42003-801	640414	2/8	¥ 63	CONVAIR \$9-42003-801	***
	FAILURE MODE-OUT OF TOLE 443 MY). UPON TEST COMP. OF THE OFFSET (PLUS S& NUS & DEGREES TWO CAPACITO FORMAL CONTING TO THE BOA	FAILURE MODE-OUT OF TOLERANCE-DURING PAT TEMPER- ATURE VIBRATION, THE PITCH GYRO DEVELOPED A MIGH OFFSET MULL IPLUB 443 MY). UFON TEST COMPLETICN, PITCH GYRO DID NOT RESPOND TO AN ANGULAR PELCTITY AND MOULD NOT TORGUE, PHASE ANGLE OF THE OFFSET PLUS SAA MILLINGLES IS OUT OF TOLERANCE WITH MINUS DEGREES. (SPEC IS ZERO DEGREES OF 150 PLUS OR MIN US & DEGREES IND CAPACITORS ON PITCH GYRO EMITTER FOLLOMER BOARD HAD BROKEN LEADS. CAPACITORS WERE NOT BONDED BY CON FORMAL CONTING TO THE BOARD. POLDERING OF CAPACITOR LEADS WAS IMPROPER.	ATION, THE PITCH GY TO AN ANGULAR PELOCI HINUS DEGREES, USP NORD HAD BROKEN LEA IS IMPROPER,	RO DEVELOR TY AND WOL EC 13 ZERC DS. CAPAGE	ED A HIG	10 00 E	BET MULL IPLUS PHASE ANGLE BO PLUS OR MIN BONDED BY CON	
_	CORRECTIVE ACTION-GVHO PACKAGE TO BE R MAS SENT TO DESIGN GROUP REQUESTING E LOOP AFTER NELDED LEAD.	CORRECTIVE ACTION-GVAO PACKAGE TO BE REWORKED. 1) BC ALERTED FACTORY AT GD/C TO CONFORMAL COATING PROBLEM. R.) AM RA H has sent to design group requesting then to change manufacturing spec. To conform to hasa soldering spec. And plac E loop after nelded lead.	FACTORY AT 6D/C TO	CONTORNAL FORM TO NA	COA 71 WG	8 3 1 K	SPEC. AND PLAC	
	AUTOFILOT-SQUARE-A/B	66C5147.1 RATE 67RO	UTP-PET 27-04374-5	66 0403	y 3	ž š	YES HONEYMELL NO JRSIDIAS	٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠
2	FAILURE MODE-GUT OF TOLERANCE-DURING THE LE DETERMINIS THE UMDANFED MATURAL PRESUE THE PROBABLE CAUSE OF ERRATIC SYRO OUTPUTA	FAILURE MODE-GUT OF TOLERANCE-DURING THE POST NO MOURS LIFE TEST PROOF CYCLE B THE TEST SPECIMEN STOP OPERATING INNS Le deterring the undamped matural presuency at room temperature, contaktnom mithim the syro singal bearing ins The probabile cause of erratic syro output,	TEST PROOF CYCLE B NATURE, CONTAMINATIO	THE TEST M MITHIN 1	8PEC1WEN	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	OPERATING UNI	

SENERAL DYNAMICS CONVAIR DIVISION

SYSTEM SUB-BVSTEM	TEST/REPORT NUMBER DIF	DIF DATA SOURCE V	EHICLE ATE DIF	AITE PRI	VENDOR NAME VENDOR PART NO	
CORRECTIVE ACTION-SPEC IT B MENE CONDUCTED, VE 1) TO F. L. SMENER-DAT	CORECTIVE ACTION-SPECIAL TESTS. TEMPERATURE, LOW LEVEL VIBRATION, YUMBLE, TORQUE AND X-RAY ON ALL UNITS FROM PET OF B MERE COMDUCTED. WEMDOR CORRECTIVE ACTION IS DESCRIBED IN MOMETNELL CUSTOMER ENGIMERRING LETTER ICEL MO. 6D/C-1-1) TO F. L. MAGNER-DATED MAY B, 1968, REF, CTCTH NO. 551-1-015	BRATION, YUMBLE, TOK IN HOMETMELL CUSTOM	IQUE AND X-R.	IT ON ALL O	UNITS FROM PET L (CEL NO. 60/C-84	***************************************
AUTOFILOT-SAURE-A/B	SLY-89-04-5113 TORGUING AMPLIFIER-TRANSFORMER	FAR 69-41922-833	660330 F.	FACTORY YES	YES 60/C	
FAILURE MOD!"-FAIL TO O -04180-3) NO OTHER FAUL RMAL SHORT CIRCUIT BETW	TO OPERATE, AMPLIFIER FAILED TO MULL THE 6790, FAILURE CAUSED BY A BURNED OUT TRANSFORMER T-1 (27) FALLTY COMPOMENTS WERE FOUND. NO CAUSE OF FAILURE COULD BE FOUND, MOST PROBABLE CAUSE HAS AN INTERENTURIEN TURINS IN THE PRIMARY WINDING.	GYNO, FAILURE CAUSE F FAILURE COULD BE F	D BY A BURN COMD. MOST	ED OUT TRAN	SFORMER T-1 (27 USE MAS AN INTE	
CORRECTIVE ACTION-MANU	CORRECTIVE ACTION-MANUFACTURING PERSONNEL MERE NOTIFIED OF E OF FAILURE NOT IDENTIFIED.	THIS FAILURE. WO OTHER CORRECTIVE ACTION TAKEN SINCE CAU	HER CORRECT	IVE ACTION	TAKEN SINCE CAU	
AUTOPILOT-SQUARE-A/B	69C5147.1 RATE GYRO	UTP-PET E7-04574-5	*******	YES	YES HONEYMELL MO JRS101AS	
FAILURE MCDE-OUT OF TO D DEMCES F WHILE IN TH SE UMCHOMN BUT COULD BE GUIFMENT AND S. EXCESSI	FAILURE MOE-OUT OF TOLEBANCE DURING PROOF CYCL B OF THE ISPT THE DAMPING RATIO EXCEEDED THE TEST LIMITS AT MINUS 3 O DEGREES F HAILE IN THE HEAT ON COMDITION, DAMPING RATIO WAS 1.037 (CORRECTED) WHERE TOLERANCE IS 0.35 TO 0.95. CAU SE UMKHOWN BUT COULD BE UNE OR MORE OF FOLLOWING, 1. DAMPING PLUID VISCOSITY IS NIGH 2. TOLERANCE BUILD UP IN TEST E BUIPMENT AND 3. EXCESSIVE FRICTION IN GIMBAL BEARING	SPT THE DAMPING RATING RATIONS ICORRECTED IN PLUID VISCOSITY IS	O EXCEEDED MERE TOLE	THE TEST LI TANCE IS O. ERANCE BUI	MITS AT MINUS 3 35 TO 0.95. CAU LD UP IN TEST E	
CORRECTIVE ACTION-VEND AND GYRO CASE TENNERAF 0-351-1-014	CORRECTIVE ACTION-VENDOR CONDUCTING TESTS ON A PET UNIT PREVIOUSLY REJECTED WITH THE SAME PROBLEM HEATER DUTY CYCLE AND GYRO CASE TEMPERATURE WILL BE RECORDED FOR COMPARISON WITH GD/C DATA. TESTING CONTINUED WITH LOT 9. REF CTGTH N PSSS-1-014	EVIOUSLY REJECTED W WITH 60/C DATA, TEST	TH THE SAME	PROBLEM HE	ATER DUTY CYCLE 9. REF CTCTH M	·····
AUTOFILOT-SQUARE-A/B GYRO PACKASE	SLV-99-04-3115 CIRCUIT BOARD CAPACITOR	FAR 68-42003-801	\$ \$18099	FACTORY YES	YES 60/C	***************************************
FAILURE MOCE-FAIL DURI INFUT, FAILURE TRACED T ACITORS MERE FOUND TO M	FAILURE MOCE-FAIL DURING OPERATION, PACKAGE FAILED DURING PAT VIBRATION WHEN THE PITCH GYRO DID NOT RESPOND TO ANY IMPUT, FAILURE TRACED TO A DEFECTIVE CAPACITOR C-3 WHICH HAD A BROKEN LEAD (ON CIRCUIT BOARD P/N 69-41896-3) ALL CAP ACITORS WERE FOUND TO MAVE IMPROFERLY BENT LEADS:	PAT VIBRATION WHEN ON A BROKEN LEAD ON	THE PITCH ST.	RO DID NOT RD P/N 69-	RESPOND TO ANY 1996-5) ALL CAP	
CORRECTIVE ACTION-FAC.	I-FACITAT AND INSPECTION PERSONNEL WERE NOTIFIED OF RECIETS OF THIS ANALYSIS AND THE REQUIREMENTS PRESTAINS TO BONDING COMPONENTS TO THE CIRCUIT BOARD.	NOTIFIED OF RECIETS OF CIRCUIT BOARD.	THIS ANALY	AT AND THE	REGUIRENENTS O	
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SEMEN. DYMANICE CONFLIR DIVILION

And Malignetisters . Angels carriers aprecial angulation of anytherasology consuming a	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	TOPILOT SYSTEM-AINBON	Ä				
BIBIEN BIR-BIBIEN	TEST/REPORT HUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	CHICLE	\$176	PRI	VENDOR HANG	_
AUTOFILOT-BEUARE-A/B GTRO PACKASE	EFC4874.1 RATE GYRG	UTF-PE7 87-04374-8		2	VER HONETUELL NO JESSOSS	TES HOWETHELL NO JRS101AS	0
FAILURE MODE-GUT OF TOL WELY, TEST TOLERANCE IS NY, HIGH MULL MAY BE CA JUST RESISTON,	FAILURE MODE-OUT OF TOLERANCE MALL DEVIATION FOLLOWING TEMP, TEST AND VIBRATION TEST MAS 437 MV AND 445 MV RESPECTS Wely, Test tolerance is 415.2 mv to 435.2 mv, also on 88-DE-29 Following Lipe Test, 24 mours, mal deviation was 442 My, migh mal hat be cause) by a swift between rotor and stator, poreign material, mismandling or degradation of ad	P. TEST AND VIBRATIO -ES FOLLOWING LIFE TO TATOR, FOREIGN MATER	N TEST MAS EST: 24 HOL FAL: NIBMAN	+37 HV A RB, MGL DLING OR	ND +45 N DEVIATION	V RESPECTS OF MAS +4g TON OF AD	
E ACTION-SPECTA	CORRECTIVE ACTION-SPECIAL TEMP. TESTS MERE PERFORMED ON INDIVIDUAL GYROS OF LOT S AND THOSE PASSING MERE RELEASED TO PRODUCTION. UNON COMPLETION OF 100 HOURS OF LIFE TESTING DURING PET. REF. CTCTH NO.SSISSING. A.D.S.	DIVIDUAL GYROS OF LOI DURING PET, REF. CTC1	A AND THO	SE PASSIS	7 PER 2	ELEANED 7	
AUTOFILOT-SAUARE-A/B BTRO PRCRASC	41-491-00-305 GYRO-DISPLACENENT, SMRD	COUNTDOWN	3050 A	ABRESA-1 YES	76.8		
FAILURE MODE-FAIL DURING OPERATION. S SYATEN EFFECT-IMPROPER 316MAL TO GAE.	DURING OPERATION, SHED FALSELY INDICATED A MPIN MOTOR FAIL, OPER SIGNAL TO GAF.	A NEIN HOLOR FAIL.					
PECT-COUNTDOAN	WENICLE EFFECT-COUNTDOWN DELAYED. A 65 MINUTE HOLD WAS REQUISED.						
CORRECTIVE ACTION-THE GYI	CORRECTIVE ACTION-THE GYRO CAN MAS PEPLACED. DISPOSITION OF THE FAILED CAN IS PENDING DUE TO LACK OF FUTURE RESURE	THE FAILED CAN IS PR	NO 2 NG DUE	70 LACK C	FUTURE	REGUIRE	
AUTOFILOT-SQUARE-A/B	69C3J43.1 DISMLACEMENT SYNO	V7P-PET 7-D4250-801	₩azo#	27.00	TES KEARFOTT NO CTO-ESOG-003		***
PATLURE MODE-OUT OF TOLER UR AND POSITION WE MAS 4.5 E ALCHE INPUT AKES MAS 3.9	FAILURE HODE-OUT OF TOLERANCE FOLLOWING 4 DAY CYCLE TEBT: FIXED RESTRAINT DRIFT POSITION NS WAS 5.20 DEGREES PER HO ALONG INPUT AXIS WAS 5.805 DEGREES PER HOUR: TOLERANCE ALLONED IN PLUS OR HIMUS 5.0 DEGREES PER HOUR: MASS UMBALANC ALONG INPUT AXIS WAS 5.805 DEGREES PER HOUR WHERE ALLONED TOLERANCE IS PLUS OR HIMUS 3.0 DEGREES PER HOUR	XED RESTRAINT DRIFT ED 14 PLUS ON HIMUS CLERANCE 18 PLUS ON	POSITION NS NAS 3.20 DEGRE 3.0 DEGREES PER HOUR. NASS MEMUS 3.0 DEGREES PER HOUR	FER HOUSES PA	D DECREES R. MASS C ER HOUR	PER HO	
CORRECTIVE ACTION-SPECIAL DHIFY TESTS HOOM FOR FAILURE AMALYSIS, REF. CTCTH-	CORRECTIVE ACTION-SPECIAL DHIFY TESTS WERE CONDUCTED ON INDIVIDUAL ITEMS OF PET LOT 8, TEST SPECIMEN RETURNED TO VE DOR FOR FAILURE AMALYSES, REF. CTCTH- 551-1-010	VIDUAL ITEMS OF PET L	LOT 6. TEST	SPECINE.	5 3	D 70 VE	
AUTOFILOT-BEUARE-A/B	ALV-F8-D4-5114 NATE GVROGCOVE-ENED	FAR E7-04874-3	HOZOA FAC	FACTORY YES	YES HOMETHELL NO	-	
FAILURE MODE-FAIL TO OPERA RCUIT. FAILURE ANALTAIS FOU F MIGM WOLTAGE AND CURRENT	TO OPERATE. GYROGCOPE WAS REJECTED SHEN THERE WAS NO SMED OUTPUT. INITIAL TESTS SHOWED AN OPEN CE CURRENT TO THE SHED CIRCUIT FROM AN UNKNOWN SOURCE.	RE WAS NO SMED CUTPU DINGS WERE SURNED, P. SOURCE,	T. ENITEAL MILURE MAS	TESTS SH CAUSED S	OKE AN C	OFCH CE	e

89C TD8

YES HONETMELL NO JRS101AS

FAILURE MODE-OUT OF TOLERANCE. DURING THE INITIAL BATIS" FACTORY PERFORMANCE TEST THE SPECIMEN FAILED DAMPING RATIO DURING THE PEATER ON CONDITION: AT MINUS SO DEGREES F WITH MEASURED VALUE OF 0.85 MHERE 0.55 TO 0.85 IS REQUIRED. CA USE IS ATTRIBUTED TO ONE OR BOTH OF TWO PROBLEMS, (1) DAMPING PLUID VISCOBITY IS HIGH (E) TOLERANCE BUILDUP IN TEST

AUTOFILOT - SQUARE - A/B

BLV-88-04-5093 BIGHAL AMPLIFIER-TRANSISTOR

100-12617-69

FACTORY 660107

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FAILURE HODE-ERRATIC OPERATION- THE 5780 SIGNAL AMPLIFIER WAS REJECTED FOR A HOIST OUTPUT, PAILURE WAS TRACED TO UN MATCHED COTPUT TRANSISTORS 8-8 AND 8-9, OPERATOR HAD FAILED TO OBSERVE THE D.DB WOLT D-C DIFFERENTIAL VOLTAGE MAXIMU HS MACH THE TRANSISTORS WERE MATCHED AND INSTALLED.

SENERAL DYNAMICS

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CONTAIN DIVISION

DIFFICULTIES REVIEW-AUTOFILOT STREEM-AIRBORNE

00000 CORECTIVE ACTION-NO CORECTIVE ACTION CAN BE INITIATED AS THE SOURCE OF THE MISAPPLIED VOLTAGE IS UNKNOWN. TEST PERSONNEL WERE NOTIFIED OF THE RESULTS OF THIS ANALYSIS. DATE DIF TIME DIF OTH VENDOR PART NO VENDOR NAME 3176 VEHICLE DIF DATA SOURCE PART NUMBER FAILED COMPOSENT NAME TEST/REPORT NUMBER SUS-STRTEM SYSTEM

3 660201

90437

FAILURE HORE-OUT OF TOLERANCE-NASS UNDALANCE ALONS THE IMPUT AXIS WAS OUT OF TOLERANCE AT 3-235 DEGREES PER HUMP DU RING THE INITIAL SATISFACTORY FERFORMANCE TEST, MAXIMUM ALLOMBLE IS 3-0 DEGREES PER HOUR: YES REARPOTT NO CTO-2506-DD1 7-04250-601 12-45 DISPLACEMENT GYRO AUTOPILOT - SQ!ARE-A/B SYRC PACKAGE

CORRECTIVE ACTION-REPEAT OF MASS UMBALANCE TEST UTILIZING RECEIVING INSPECTION EQUIPMENT INSTEAD OF ELECTRICAL TEST LAB EQUIPMENT RESULTED IN FAILURE ON E-8-64 OF SAME PART. SPECIAL DRIFT TESTS WERE CONDUCTED ON INDIVIDUAL STEMS OF MET LOT 8. TEST SPECIMEN RETURNED TO VENDOR FOR PAILURE ANALYSIS. REF. CTCTH 551-1-010.

SHED WIDGE TRANSISTOR 34.V-13-04-3097 AUTOPILOT -- SQUARE -- A/B GYRO PACKASE

27-43186-801

101040

YES 60/C

FACTORY

660131

FAILURE HODE-FAIL TO CEASE OPERATION. THE SPIN-HOTOR ROTATION-DETECTOR (SHED) WAS REJECTED WHEN IT GAVE A GO INDICATION WHEN IT SHOULD HAVE AN OPEN ENITTER CAUSED BY HISAPPLICATION OF TEST VOLTAGE.

CORRECTIVE ACTION-PRODUCTION PERSONNEL MERE HOTIFIED TO TAKE MORE CARE WHEN CONNECTING MODULES TO THE TEST SETA

RATE GYRO

AUTOPILOT - SQUARE - A.TB

GYRO PACKAGE

27-04574-5

3 M0127

CORRECTIVE ACTION-VENDOR DID CHECK DAMPING AT HINUS SO DEGREES F BUT DID NOT RECORD THE READING ON THE DATA SHEET. CO/C GA HAS INSTRUCTED VENDOR TO RECORD THIS READING. GA TO INSURE VENDOR MEASUREMENT IS BEING TAKEN AT THE LOMEST G TRO TEMPERATURE. ALSO RECOMMENDED TEST EQUIPMENT TOLERANCES BE REFLECTED ON THE PET DATA SHEET. ž ž

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SENE DYNAMICS CONVAIR DIVISION

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STSTEN SUR-STSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE		PRI VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-AN INT CEDURE IS ADEGUATE AND TO S AMALYSIS.	CORRECTIVE ACTION-AN INVESTIGATION OF THE PROCEDURE FOR NATCHING ARD INSTALLING OUTPUT TRANSISTORS REVEALED THE PRO- EDURE IS ADEQUATE AND THAT ALL TOLERANCES ARE STATED PROPERLY. PRODUCTION PERSONNEL MERE MADE OF THE RESULTS OF THI	ICHING AND INSTALLIN	C OUTPUT TRANS	ISTORS R	EVEALED THE PRO RESULTS OF THE	***************************************
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	R7C4874.1 RATE 6760	UTP-PET 27-04574-5	9/09 9 010 9 0		TES HONETMELL NO JRSSDIAS	•••••
FAILURE MODE-OUT OF TOLI URING THE HEATER ON CONDI ATTRIBUTED TO OME OR BOI	FAILURE MODE-OUT OF TOLERANCE, DURING THE INITIAL SATISFACTORY PERFORMANCE TEST THE SPECIMEN FAILED DAMPING RATIO D URING THE HEATER ON CONDITION AT - 30 DEGREES F WITH NEASURED VALUE OF 1.06 WHERE 0.53 TO 0.05 IS REGUIRED. CAUSE IS ATTRIBUTED TO ONE OR BOTH OF THID PROBLEMS (1) DANPING PLUID VIOCOSITY IS HIGH (2) TOLGRANCE BUILD UP IN TEST EQUIPM	TORY PERFORMANCE TES TO VALUE OF 1.06 MHE O VIBCOSITY IS HIGH	T THE BRESTMEN RE 0.53 TO 0.9 (2) TOLERANCE	FAILED OF BUILD UP	DAMPING RATIO D JIRED. CAUSE IS IN TEST EQUIPM	······································
CORRECTIVE ACTION-VENDOS DZC QA MAS INSTRUCTED VES NO TEMPERATURE. ALSO RECO	CORRECTIVE ACTION-VENDOR DID CHECK DAMPING AT HIMUS 30 DEGREES F BUT DID NOT RECORD THE READING ON THE DATA SMEET G DAC GA HAS INSTRUCTED VENDOR TO RECORD THIS READING. BA TO INSURE VENDOR MEASURENEM IS BEING TAKEN AT THE LONEST GY NO TEMPERATURE. ALSO RECOMMENDED TEST EQUIPMENT TOLERANCES BE REFLECTED ON THE PET DATA SMEET.	REES F BUT DID HOT R INSURE VENDOR HEASUR BE REFLECTED ON THE	ECORD THE READ EMENT IS BEING PET DATA SHEET	TAKEN A	HE DATA SHEET G T THE LONEST GY	
AUTOFILOT-SQUARE-A/B GYRO PACKÁSE	A-88-04-3083-F RATE 6YRO	FAR 27-04574-5	86010S FACTORY		YES HONEYMELL NO \$10-2027	10000
FATLURE MODE-FAIL TO OPE EMERATOR IN RATE 67RO, FI ROBLEM MAY HAVE EXISTED	FAILURE MOCE-FAIL TO OPCRATE AT PRESCRIRED TIME. TESTS ON NEXT ASSEMBLY (69-42003-5) SHOWED NO OUTPUT FROM SIGNAL EMERATOR IN RATE GYRO, FUNCTIONAL TEST SHOWED ALL PARAMETERS MERE MITHIN TOLERANCE, IT IS CONSIDERED POSSIBLE THAT MOBLEM MAY HAVE EXISTED IN NEXT ASSEMBLY, HOMEVER, REPLACEMENT OF GYRO CORRECTED PROBLEM.	MEXT ASSEMBLY (69-42003-5) SMO B WERE WITHIN TOLERANCE, IT IS ENT OF GYAO CORRECTED PROBLEM.	003-5) BHOMED NCE, 17 18 CON D PROBLEM.	NO CUTFU	T FROM SIGNAL 6 POSSIBLE THAT P	
CCARECTIVE ACTION-REPLACED GYROSCOPE.	CED GTROSCOPE.				A CONTRACTOR AND A CONT	·
AUTOFILOT - SQUARE - A/B GYRO PACKAGE	69C4977 DISPLACEMENT 6YRO	UTP-PET 7-04250-001	921218 60/0		YES KEARFOYT NO C702304001	*0204
FAILURE MODE-CONTANTNATI ESSFULLY PASSING OTHER FI IN CENENT (BOND MASTER) FONENTS (B) INFROPER CLEA	FAILURE MODE-CONTAHINATION. DURING SPECIAL STICTION TESTS SPECIMEN FAILED DUE TO STICTION IN ME POSITION AFTER SUCC ESSFULLY PASSING OTHER FIVE ORIENTATIONS, CAUSE OF STICTION DUE TO LAHINATIONS OF PICK-OFF ROTOR SCPARATED RESULTING IN CENEUT (BOND MASTER) CHIPS CONTAHINATING FLUID. PLUID CONTAHINATION DUE TO (A) IMPROPER OUT GASSING OF MOUND CON FONEHTS (S) IMPROPER CLEANING OF BELLOMS (C) DEGRADATION OF BUALITY AT VEHIORS FACILITY.	SPECIMEM FAILED DUE DUE TO LAMINATIONS ONTAMINATION DUE TO GUALITY AT MEMOONS	TO STICTION IN ME POSITION OF PICK-OFF ROTOR SEPARATED (A) IMPROPER OUT GASSING OF FACILITY.	NE POSI	POSITION AFTER SUCC SCPARATED RESULTING BASSING OF MOUND COM	
CORRECTIVE ACTION-ENGINEERING REVIEW BOARD 10M CLEANING, BITCTION TESTING, FLUID FLUBN AND ASSENDLY OF GYROS FOR FUTURE PRODUCTION TSSES, 85D APPROVED ACTION ON 14 JAN. 1866	CORRECTIVE ACTION-EMBINEERING REVIEW BOARD NUMBER 310 ON 13 JAN.1966 APPROVED ACTIONS WHICH IMPROVES VENDOR INSPECTION CLEANING, STICTION TESTING, FLUID FLUEN OPERATION, RECORDINGS, AND OVERALL SUALITY CONTROL DURING MANUFACTURE OF AND ASSENDLY OF GYROS FOR FUTURE PRODUCTION AND FOR REMORK OF ALL SUSPECTED CONTAHINATED SYROS RECEIVED SINCE 1 SEPTINGS, 850 APPROVED ACTION ON 14 JAN. 1866	S JAN.1866 APPROVED TOIMGS, AND OVERALL OF ALL BUSPECTED CO	ACTIONS WHICH SUMLITY CONTRO NTAMINATED SYR	IMPROVES L DURING OS RECEI	VENDOR INSPECT MANUFACTURE OF VED BINCE 3 SEP	•
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CONVAIR DIVISION

DIPFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

15 JON 1888

	8787EW 808-8787EM		TES	TEST/REPORT HUBER	DIF DATA SOURCE PART NUMBER		11ME 01	P OTH	VEHICLE BITE PRI VENDOR MANE	·····
	AUTOFILOT - SQUARE-A/B	" "	SLV-99-04-3079-F	SLV-99-04-5079-F BIGHAL AMPLIFIER TRANSISTOR	FAR 60-41011-3	6 3111 6	FACTORY	YES NO		.00140
	FAILURE MODE-OPEN E ED 10 A BURNED BASE O THE BASE OF THE TR TRECTLY 10 THE TRAMS	H ELECTRICA SE LEAD ON TRAMBISTOR AMBISTOR EI	AL. SUBASS ONE OF THE STREET BEFO	H ELECTRICAL, SUBASSEMBLY TESTS REVEALED THIS AMPLIFIER HAD A DISTORTED CUTPUT, FAILURE IS ATTRIBUT SE LEAD ON ONE OF THE CUTPUT TRANSISTORS. BASE LEAD WAS BURNED MHEN AN EXCESS WOLTAGE WAS APPLIED TO TRANSISTOR, SINCE THE AMPLIFIER CIRCUITRY HAS LIMITING RESISTORS, THIS WOLTAGE HAD TO BE APPLIED DANSISTOR EITHER BEFORE OR AFTER INSTALLATION ON THE CIRCUIT BOARD. THE EXACT TIME OF THE WOLTAGE APPLIED BE LEARNED.	D THIS AMPLIFIER HAD A DISTORTED CUTPUT, FAILURE IS ATTRIBUT S. BASE LEAD WAS DURNED WHEN AN EXCESS VOLTAGE WAS APPLIED T TRY HAS LINITING RESISTORS, THIS VOLTAGE HAD TO BE APPLIED D ATION ON THE CIRCUIT BOARD, THE EXACT TIME OF THE VOLTAGE AP	A DISTORTED MED WHEN AM ISTORS, THIS BOARD, THE	OUTPUT. EXCESS V VOLTAGE EXACT TE	PASIL HAD HE OF	ME IS ATRIBUT E WAS APPLIED T O BE APPLIED D THE VOLTAGE AP	
	CORRECTIVE ACTION-NOME.		CAUSE NOT KNOWN.	NO-M.						•
	AUTOFILOT-SQUARE-A/B	Ua	C7-98-04-246 DI SPLACENENT	CT-98-DA-E44 DISPLACEMENT 67RO PACKAGE	FAR 55-41002-665	45117	ETR	<u>۽</u> 8		2074
	FAILURE MODE-OUT OF T D FOR AN ERRONEOUS 24 OF EXCESSIVE WOLTAGE	7 TOLERA 24 VOC C 25 TO TH	NACE. UNIT. DUTPUT FROM HE EMITTER-	FAILUME MODE-OUT OF TOLERANCE, UNIT, WHICH CONSISTS OF A MATCHED SET-P/N 59-41DOR-865 AND 55-41G19-803, MAS REJECTE D FOR AN ERRONEOUS 24 VOC OUTPUT FROM THE PITCH RATE EMITTER FOLLCHER. FAILURE ATTRIBUTED TO IMADVERTENT APPLICATION OF EKCESSIVE VOLTAGE TO THE EMITTER-FCLLCHER OUTPUT.	A MATCHED SET-P/N 51 TTER FOLLOMER, FAILN	-41002-865 A RE ATTRIBUTE	35-41 25 134-41	OVER T	DS, WAS REJECTE ENT APPLICATION	
	CORRECTIVE ACTION-R	FCOME	OED ETR 11	CORRECTIVE ACTION-RECOMMENDED ETR TEST PROCEDURES BE REVIEWED FOR POSSIBLE SOURCE OF PROBLEM.	VIEWED FOR POBSIBLE	BOURCE OF PR	GBLEN.			
	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	***	ETCASST DISPLACEMENT GYBO	MT GYRO	UTP-PET 7-04250-801	621109	3 /9	÷ 8	KEARFOTT C702306001	80804
	FAILURE MODE-CONTAB IN MY MS. AND WS POS E TO METAL PARTICLES OF BELLOAS (C) DEGR	TITIONS. CONTACTOR	A STICTION STICTION MINATING FL	FAILURE WODE-CONTAMINATION STICTION FAILURES DURING INITIAL SATISFACTORY PERFORMANCE TEST WHILE SPECIMEN OPERATING. IN MIN MAIL NO. AND WS POSITIONS. STICTION PROBLEMS MERE DUE TO METAL PARTICLES CONTAMINATING FLUID CAUSED BY (A) IMPROPER QUIGASSING OF MOUND COMPONENTS (B) IMPROPER CLEANING OF BELLOWS (C) DEGREDATION OF BUALITY AT VEHOORS PACILITY.	TIAL SATISFACTORY PE TION ON RERUN TEST C WROPER OUTGASSING C TY.	RFORHANCE TEST WHILE SPECINEN OF MEE NOV 1965, STICTION PROBLEMS IF NOUND COMPONENTS (B) IMPROPER	ST WALLE	346 :: 30 :: 31 30 ::	INEN OPERATING ROBLEMS MERE DU PROPER CLEANING	
	CORRECTIVE ACTION-ENGINEERING REVIEW BOARS TON, CLEANING STICTION TESTING, FLUID FLUSS AND ASSENDLY OF GYROS FOR FUTURE PRODUCTION T.1965. SED APPROVED ACTION ON 14 JAN 1966	CHETWEET TON TEST TON FOR TACTION	RING REVIENTING, FLUIL FUTURE PRO	CORRECTIVE ACTION-ENGINEERING REVIEW BOARD MAMBER 519 ON 13 JAN 1966 APPROVED ACTIONS WHICH IMPROVES VENDOR INSPECTION, CLEAKING STICTION TESTING, FLUID FLU3H OPERATION, RECORDINGS, AND OVERALL GUALITY CONTROL DURING MANUFACTURE OF AND ASSENDLY OF GYROS FOR FUTURE PRODUCTION AND FOR REMORK OF ALL BUSPECTED CONTAMINATED GYROS RECEIVED BINCE 1 BEP 1.1965. SED APPROVED ACTION ON 14 JAN 1966	N 13 JAN 1968 APPROV ECCHDINGS, AND OVERA COR CF ALL BUSPECTED	ED ACTIONS N	HICH THE CONTROL D D SYROR	MOVES URING RECEI	VENDOR INSPECT MANUFACTURE OF VED BINCE 1 BEP	****
	AUTOFILOT-SQUARE-A/B		A-9D-04-3073F D1 &PLACEHENT	A-SD-04-5073F DIAPLACEMENT GYROGCOPE/BMRD	FAR E7-41002-455	140F	Ĕ	ž g	YES REARFOIT NO	
4	FAILURE MODE-STRUCT URE MAS CONFIRHED AN LED UMDER ENCERSIVE MTAMINATION APPEARED	TURAL. II DO RESUL TEMBION	DURING HIST LIED PROH / N, RESULTIN	RUCTURAL, DURING MISSILE TESTS, NO SPIN MOTOR ROTATION DETECTOR (SMRD) OUTELT MAS OBTAINED. THE FAIL) AND RESULTED FROM AN OPEN SMRD FLEXLEAD FAIL IN RESULTED FROM AN OPEN SMRD FLEXLEAD FAIL IN RESULTING IN BREAKING OF THE SOLDER SOND SETWERN THE FLEXLEAD AND THE CLIF, ALTHONÓN COLABED ON THE FLEXLEAD AND THE CLIF, ALTHONÓN CONTAINED ON THE FLEXLEAD AND THE FLEXLEAD EXILED CONTAINED ON THE FAILURE, CONTAINED ON THE FAILURE, CONTAINED ON THE FAILURE, CONTAINED ON THE FAILURE.	MOTOR ROTATION DETECT DIN THE PITCH DISPLE E SCHOOL SETWER NOT KNOWN WHETHER I	TOR (SMRD) C ACEMENT GYRC N THE FLEXLE HIS HAD ANY	MICOPET MA MICOPET TA TAB AND T	# # # # # # # # # # # # # # # # # # #	MS OBTAINED. THE FAIL THE SHED FLEXLED FAI THE CLIF. ALTHOUGH CO ON THE FAILURE. CONTA	
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SENERAL DYNAMICS CONVAIR DIVIBION

13 JUN 1965

DIFFICULTIES REVIEW-AUTOFILO? SYSTEM-AIRBORNE

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VENDOR NAME	THE PLUGEGE. ACTION MS. D. MAS. INCOM. THE603. VE.	MALUES. DUE	YES NO A NO GO DURING A GI SPECIFICATION GAIN DECEASE IN GAIN. NO E ISOLATED.	YES KEARFOIT NO CTOR (SMRD) OU HRCHOUS SPIED. ACNIME RATED L
TIME DIF OTH	R PLUK WITH CORRECTIVE THE PLEKLEA BIDER UBING	FACTORY NO	FACTORY YES NO ET GAVE A NO POUT OF SPEC	WTR VES TION DE FECTO TAIN STACHED THE APPROACE
VENICLE DATE DIF	or THE BOLDE. 7-04230-3). 7-04230-3). 7-04250-3).	6510E7 6510E7 CENT BELOM TO	631022 N THE TEST SI SCATED A LOW RCENT INTERM V COMPONENT	148F # # # # # # # # # # # # # # # # # # #
DIF DATA SOURCE PART NUMBER	D AND A REACTION (OPE ASSEMBLY (P/N D WHEN AN IMPROVER HENDED THAT THE AS	COMPOSITE-PACTORY	FAR 68-418EE FACTORY YES 68-418EE-8E1 NO ILURE MAS EVIDENT WHEN THE TEST SET GAVE A NO GO DU SUBASSENBLY LEVEL INDICATED A LOW OUT OF SPECIFICAT EXHIBITED A 3 TO 5 PERCENT INTERHITTENT DECEASE IN LOST BEFORE THE FAULTY COMPONENT COALD BE ISOLATED.	FAR E7-41002-655 ILE TESTS, NO SPE INT GYROSCOPE HOTON ETION MITH A LONG ETION WITH A LONG
TEST/REPORT NUMBER FAILED COMPONENT NAME	PLOAT FLUID. CORRECTIVE ACTION-NO CORRECTIVE ACTION ON THE FAILED GARD A REACTION OF THE SOLDER FLUX WITH THE FLUOROLUSE (CORRECTIVE ACTION MAS TAKE NECAROIDS THE CONTAMINATION PROBLEM AND THE PAILED GARDAND WAS TAKE IN THE ACARDIDS THE CONTAMINATION PROBLEM AND THE BORNEN PLEARDIDS THE CONTAMINATION PROBLEM AND THE BORNEN PLEARDED THAT THE AIR FORCE CONSIDER USING THE -801 VERSION OF THE STROSCOPE, IT IS RECOMMENDED THAT THE AIR FORCE CONSIDER USING THE -801 VERSION	SECTABLISTER GENO-ANTLIFIER GENO-ANTLIFIER GENO-ANTLIFIER GENO-ANTLIFIER GENO-ANTLIFIER GENOLATORENING FOIENTIONETER.	SLV-89-04-5079-F TORBUCK ANMLIFIER TORBUCK ANMLIFIER FA RETEST OF THE ANMLIFIER AT THE ALLURE NAS COFTENED. ANMLIFIER E FOUND BECAUSE THE FAILURE NAS CAUSE OF FAILURE NOT FOUND.	
8787EF 878 - 978	HIMATION IS BELIEVED DUE TO IMPROPER FLOAT FLUID. CORRECTIVE ACTION-NO CORRECTIVE ACT N RECARDIDE THE CONTAMINATION PROBLE TED IN THE POARSO-GOL WESTON OF THE	AUTOFILOT-SQUARE-A/B GYRO PACRASE FAILURE PODE-GUT OF TOLES IMPROPER IETUP OF THE ASE	AUTOPILOT-SQUARE-A/B FAILURE HODE-CUY-OF TOLE IDANCE TORNCEING TEST. A MITH A GUIDANCE INVOT. FA CAUSE FOR THE FAILURE MAS CORRECTIVE ACTION-HOME.	AUTOPILOT-SQUARE-A/B GTRO PACKAGE FAILURE MODE-BTRUCTURAL. WAS OBTAINED. THE GYROGE RING FAILURE IN THE GYROGE COPRECTIVE ACTION-FAILURE

SENERAL DYNAMICS CONVAIR DIVISION

			DIFFICULTIES REVIEW-AUTOMICOL STRIKE-ALMBOANS	FILCT STRIKE-AIMBON	Ě				,
L	SYSTEM SUB-SYSTEM	2	TEST/REPORT NUMBER	DIF DATA SCURCE PART HUMBER	VEHICLE DATE DIF	\$17E 71ME 01F	\$ 50 E 2	PRI YENDOR NAME OTH VENDOR PART NO	
135	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	SLY-89-04-5086F CIRCUIT BOARD	-5068F	FAR 89-41067-1	7111	FACTORY	9 9	3/ 0	*****
- 3 -	FAILUNE MODE-ERRATIS OF GE, FAILUNE NOT CONFIRME T THE TEST SETS, CERTAIN	ERATION- UNI D. TWO HONTI MIRES NERE	FAILUME MODE-ERRATIC OPERATION— UNIT WAS REJECTES DURING FUNCTIONAL TEST FOR OSCILLATION OF PITCH FINE MEATER VOLTA 6E. FAILUME NOT CONFIRMED. TWO MONTHS LATER, WHILE INVESTISATING THIS FAILUME, A CABLING DEFICIENCY WAS DISCOMENED A T THE TEST SETS. CERTAIN WIRES WERE SHORTED TO EACH OTHER AND TO GROUND INTERHITTENTLY.	MCTIONAL TEST FOR O TIMG THIS FAILURE, D TO GROUND ENTERME	GCILLATIO A CABLING TTENTLY.	B OF PITCIEN		E HEATER VOLTA	
	CORRECTIVE ACTION-FAILURE NOT CONFIRMED.	RE NOT CONF.	INED.						
35	AUTOPILOT-SQUARE-A/B GYRO FACKAGE	SLV-99-04-5080-F POLER GROUP		FAR 69-41067-1	630059	PACTURY	1 0		••100
_ 2 2	FAILURE HODE-OUT OF TOL IN THE PITCH CHAMBEL. PORTED FAILURE AND DISC	ERANCE, THE FAILURE NAS REPANCY IN	FAILURE HODE-OUT OF TOLERANCE, THIS POWER GROUP WAS REJECTED WHEN ITS NEXT ASSEMBLY GYROSCOPE PACKAGE MAD A LOM GAI N IN THE PITCH CHANNEL. FAILURE WAS NOT COMFIRMED, HONEVER, A DISCREPANCY WAS FOUND IN THE YAM CHANNEL. CAUSES FOR R EPORTED FAILURE AND DISCREPANCY IN THE YAM CHANNEL NERE NOT FOUND.	D WHEY 178 NEXT ASS A DISCREPANCY WAS F FOUND.	EMBLY GYR OUND IN T	OSCOPE PA	CKAGE	HAD A LOW GAT.	
	CORRECTIVE ACTION-NOME.	FAILURE NO	PAILURE NOT CONFINKED.						
133	AUTOFILOT-SQUARE-A/B	60/CAGUES	50/CA5463-001-45/FC-CO-01-0071-018 COMPOSITE-FACTORY	COMPOSI TE-PACTORY	7116 650923	FACTORY 157	3 8		•
- 3 -	FAILURE MODE-FAIL DURIN EXPECTED NEGATIVE RANFS E NORMALLY PPEVENTS THIS	G OPERATION IN RESPONSE OCCURRENCE	. DURING OPERATION. AT 157 SEC AND 184 SEC CHANNELS 1, Z AND B OF THE SANBORN RECCRIDER EXHIBITED UN RAMPS IN RESPONSE TO A NEGATIVE YAW STEERING SIGNAL FROM GUIDANCE. A POSITIVE YAM BIAS FROM THE AG 15 THIS OCCURRENCE. THIS CONDITION WAS CAUSED BY IMPROPER WALLING OF THE AGE WALLING AMPLIFIER.	CHANNELS 1, E AND B NG SIGNAL FRON GUID ED BY IMPROPER MALL	ANCE. A P	AMBORN RE OSITIVE Y E AGE MUL	CCEOC AM BI	R EMIBITED UN AS FRON THE AG AMPLIFIER.	
	STRIEN EFFECT-SHPROPER	ROPER ANALOG SIGN	BYBTEM EFFECT-SHIROMER MAKING BIGNALS, INEXPECTED NEGATIVE RAMPS OCCUTRED AT 1ST AND 164 IN RESPONSE TO A MEGATIVE AM STEERING BIGNAL FROM GUIDANCE.	RAMPS OCCURED AT 1	87 AND 18	4 IN RESP	OF SEC	TO A MESATIVE	
	WENICLE EFFECT-COMPOSITY	E RE-SCHEDU	VEHICLE EFFECT-COMPOSITE RE-SCHEDULED, POST-COMPOSITE TESTING RESULREE.	NG REGUIREE.					. <u></u>
	CORRECTIVE ACTION-THE A	SK MALLING	CORRECTIVE ACTION-THE AGE MALLING ANTLIFIER WAS REPLACED.					ephropatic engagements entre entre entre	
35	AUTOFILOT-SQUARE-A/B STRO PACKALE	3LV-89-04-5076-F	-5070-P	FAR 80-07800-02:	650820	FACTORY	ž š	TES MAGNETIC CONTR NO OLS TCTC-1	
- 5 	FAILURE MODE-OUT OF TOL UNSTABLE MEATER CONTROL	ERANCE, TEMPERATURE C IN THE PLTCH CHAMMEL.	OF TOLEMANCE. TEMPERATUME CONTROL UNIT WAS REJECT WHEN ITS NEXT ASSEMBLY SYROGCOPE PACKAGE HAD AN UNTROL IN THE PITCH CHANNEL.	REJECT WEN ITS NE	X7 A83E18		š	ACKAGE HAD AN	······································
	CORRECTIVE ACTION-WOME.	FAILURE NO	HOME, FAILURE NOT COMPIRMED.						
	A THE PARTY OF THE		er e	energia estimata propriata de la compositorio della compositorio della compositorio della					_
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CONVAIN DIVISION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

A TER PRINCIPLE MENDOR MANGE	04 × 0/09	FAILURE MODE-FAIL DURING OPERATION. DURING THE TEMPERATURE TEST AT 180 DEG F. THE GYAO FAILED TO RESPOND TO 28 VDC TORGUING INFUTS IN PROOF CYCLE C. TORGUER COLL RESISTANCE WAS SATISFACTORY AT APPROXIMATELY 4DD CHMS. AFTER E 1/4 HO WAS AT + 135 DEG F TORGUING WAS PERFORMED WITH SATISFACTORY RESULTS. CAUSE UNKNOWN. CORRECTIVE ACTION-SIX OTHER GYROS OF THIS TYPE WERE TESTED AND FOUND NOT TO MAVE THIS DISCREPANCY. IT IS FELT THAT THIS WAS AN INDIVIDUAL FAILURE AND NO FUTHER ACTION WILL BE TAKEN UMESS DICTATED BY THE RESULTS OF HOMETVELLS INVESTITED.	MIR YES 805150 106 NO	FAILURE HODE-OUT OF EXPECTED TEST VALUE, A HIGHER THAN USUAL AXIAL ACCELERATION AT BECO ASSOCIATED MITH A LIGHT PAY LOAD CREATED A CONDITION OF DIVERGENT SLOSM DURING THE LATTER PORTION OF BOOSTER PHASE. SYSTEM EFFECT-INFROPER AMALOG SIGNALS, BOOSTER ENGINE PITCH MOVEMENTS REACHED A MAXIMUM OF 4.5 DEGREES PEAR TO PEAR THESE LIMITS ARE CONSIDERED MARSHALF FOR AUTOPILOT STABILITY. VEHICLE EFFECT-MOME, VEHICLE MAINTAINED STABILITY, MOMEVER, VEHICLE CONTROL WAS MARSHALL. CORRECTIVE ACTION-MOME RECOMMENDED, BECAUSE LIGHT PAYLOAD IS NOT PLANMED TO PLY ON FUTURE SERIES F WHICLES.	TOPILOT-SAUME-A/B FTAMS71/P68-CO-03-OAC6 COMPOSITE-J FACT 131D 568 YES 697486 RO PACKAGE CIRCUIT BOARD FAILURE MODE-FAIL DURING OPERATION THE SPIN NOTOR ROTATION DETECTOR (SHRD) CUTPUT DROPPED OUT NOMENTARILY DUE TO BE SYSTEM EFFECT-NOWER. WEMICLE EFFECT-NOWE.	SELV-SD-04-5044F DISPLACEMENT GYRO DOS-1 OPERATION, SPIN-NOTOR ROTATION-DETECTOR (SMED) INDICATIONS WERE ERRATIC. THE PAILURE WAS CONFI FINAL CAUSE OF THE DETERIORATION MAS NOT FOUND.
DIF DATA SOURCE VEHICLE		160 DEG F, THE GYR FACTORY AT APPROXIS CAUSE UNKNOWN. D NOT TO HAVE THIS MESS DICTATED BY	1475	ACCELERATION AT BE ON OF BOOSTER PHASE NTS REACHED A MAKIN E CONTROL MAS MARGI LAMED TO PLY ON FY	COMPOSITE-J FACT 131D 650728 ETECTOR (SHRD) GUTFUT DRO RY IB BURCEFIBLE TO SHAL	TAR 1109 88-42 85027 8003-1 109 1000-1 1000 1000 1000 1000 1000 1
	FAILED COMPONENT NAME PART NO UTP-PET RO RT-04374-8	FAILURE MODE-FAIL DURING OPERATION, DURING THE TEMPERATURE TEST AT 160 DEG P, THE TOKEUING INCUSS SATISFACTORY AT APPROURS AT + 135 DEG F TOREUING MAS PERFORMED WITH SATISFACTORY RESULTS. CAUSE UNKNOWN. CORECTIVE ACTION-SIX OTHER GYROS OF THIS TYPE WERE TESTED AND FOUND NOT TO MAVE THIS WAS AN INDIVIDUAL FAILURE AND NO FUTHER ACTION MILL BE TAKEN UNLESS DISTATED	-401-00-147 FLIGHT	FAILURE HODE-OUT OF EMECTED TEST VALUE, A HIGHER THAN USUAL ACCELERATION AT BECO ASSOCIATED MITH A LI- DAD CREATED A COMDITION OF DIVERENT SLOWN DURING THE LATTER PORTION OF BOOSTER PHASE. SYSTEM EFFECT-IMPROFER ANALOG SIGHALS. BOOSTER ENGINE PITCH MOVEMENTS REACHED A MAXIMUM OF 4.5 DEGREES PEAK THESE LIMITS ARE CONSIDERED MARGINAL FOR AUTOPILOT STABILITY. WEHICLE EFFECT-MONE. VEHICLE MAINTAINED STABILITY. HOMEVER, VEHICLE CONTROL WAS MARGINAL. CORRECTIVE ACTION-NOME RECOMMENDED, BECAUSE LIGHT PAYLOAD IS NOT PLANNED TO PLY ON FUTURE SERIES F WHICLES.	TOPILOT-SAUARE-A/B FTANSTL/PEB-CO-DS-DAC6 COMPOSITE-J FACT 131D 348 RO PACKAGE CIRCUIT BOARD FAILURE MODE-FAIL DURING OPERATION THE SPIN NOTOR ROTATION DETECTOR (SHRD) GUTPUT DROPPED OUT VDC TRANSIENTS CAUSED BY ARHING THE PROGRAMMER. THIS CIRCUITRY IS BUSCEPTIBLE TO SHALL 28 VDC SYSTEM EFFECT-NOWE. CORRECTIVE ACTION-NOME.	FAR 13044F 141 6780 169-4200 103-4 16-4200 163-4 16-4200 163-4 16-4200 16-
TEST/REP	ETCATE &	DURING OPERATION, DURING PROOF CYCLE C. TORGUER ! TORGUING MAS PERFORMED ! SALVER GYROS OF THIS SUX OTHER SYROS OF THIS SUMMER FAILURE AND NO FUTHER	TH NO. 551-1-004.	FAILURE HODE-OUT OF EXPECTED TEST VALUE, A HIGHER THAN USUAL AN LOAD CREATED A COMDITION OF DIVERGENT SLOBH DURING THE LATTER RY SYSTEM EFFECT-INFROPER ANALOG SIGNALS, BOOSTER ENGINE PITCH MO , THESE LIMITS ARE CONSIDERED MARGINAL POR AUTOPILOT STABILITY. VEHICLE EFFECT-MOME, VEHICLE MAINTAINED STABILITY, HOMEVER, VED CORRECTIVE ACTICH-MOME RECOMMENDED, BECAUSE LIGHT PAYLOAD IS M	TOPILOT-SQUARE-A/B FTAN371/P6B-CO-D3-DAC6 RO PACKAGE CIRCUIT BOARD FAILURE HODE-FAIL DURING OPERATION THE SPIN HOT VOC TRANSIENTS CAUSED BY ARMING THE PROGRAMMER. SYSTEM EFFECT-IMPROPER DISCRETE SIGNAL. VEHICLE EFFECT-MONE.	
EST ST.	aud-aratem iutofilot-aquare-a/#	FAILURE MODE-FAIL DI TORBUTHE INFUTS IN PR URS AT + 135 DEG F TO CORRECTIVE ACTION-31 THIS WAS AN INDIVIDUA	1164710N, REF. CTCTM AUTOPILOT-38UME-A/B ETRO PACKAGE	FAILURE HODE-OUT OF LOAD CREATED A COMDIT SYSTEM EFFECT-IMPROF , THESE LIMITS ARE CO WEMICLE EFFECT-MOME.	AUTOPILOT-SAUARE-A/B ETRO PACKAGE FAILURE MODE-FAIL DUBIN VDC TRANSIENTS CAUSED 8 SYSTEM EFFECT-IMPROPER VEHICLE EFFECT-MOME. CORRECTIVE ACTION-MOME.	AUTOFILOT-BELARE-A/B BYRO PACKASE PAILUNE MODE-ERRATIC NHED AND MAS CAUSED 8 8 A/M BIG-ESZES 7 THE

GENERAL DYNAMICS CONVAIR DIVISION

CORRECTIVE ACTION-NO			DOR HAR CONDU	0115 6310		
MES. (MET-LETTEN FROM	CORRECTIVE ACTION-NO SPECIFIC CORRECTIVE ACTION DUE TO THIS FAILURE. THE VENDOR HAR CONDUCTED STUDIES AND HAS ADDED A MOTOR PERFORMINCE CHECK AT THE COMPLETION OF THE & DAY GYRO RUM-IN TEST AS THE RESULT OF PREVIOUSLY REPORTED FAIL UMES. (REF-LETTER PRON REARROIT TO CONVAIR, DATED JUNE 10, 1965).	NATE OF STATEMENT	THE REBULT O	3	IES AND HAS ADDED SLY REPORTED FAIL	993235
AUTOFILOT-SQUARE-A/B	3LV-98-04-3068F CIRCUIT BOARD	FAR 69-41067-1	430723	FACTORY Y	7£8 100	
FAILURE MODE-ERRATIC (AGE MAS GRSENVED OBCILL BY SOME PROBLEM IN THE ER AM INVESTIGATION CO	FAILURE MODE-ERRATIC OPERATION. DURING NEXT ASSEMBLY GYROSCOPE PACKAGE FUNCTIONAL TESTS, THE PITCH FINE MEATER WOLT AGE WAS GESERVED OSCILLATING. THE REPORTED FAILURE MAS NOT CONFIRMED. THE FAILURE REPORTED MAS MOST PROBABLY CAUSED BY SOME PROBLEM IN THE NEXT ASSEMBLY GYROSCOPE PACKAGE OR IN THE TEST SET. NO SPECIFIC CAUSE COULD BE FOUND EVEN AFTER AN INVESTIGATION COMDUCTED AT THE REJECTING DEPARTMENT.	SYROGCOPE PACKAGE FUNCTION NOT CONTINUED. THE FAIL M. IN THE TEST SET. M. INT.	TOMAL TEBTS, LUME REPORTED SPECIFIC CAU	THE PLICH	FINE HEATER WOLT PROBABLY CAUSED BE FOUND E'EN AFT	
CORRECTI WE ACTION-FAIL AUTOFILOT-SQUARE-A/B GTRO PACKAGE	CORRECTIVE ACTION-FAILURE NOT CONTINUED: NO CORRECTIVE ACTION: TOPILOT-SQUARE-A/B LV-99-04-5041F FAICHCREE FAILURE BY PACKAGE 55	7AR 55-41002-063	650722 F	FACTORY Y	YES KEARFOTT NO	9205
FALLME MONE-OUT OF TO 04250-803, SAN MORENSE MLEADS, THE CAUSE OF TH RING GTROSCOPE WARN-UP.	FAILURE MODE-OUT OF TOLENANCE-THE PROSCUE FALLANE ENTRED TO FIRED RESTRAINT DRIFT CAUSED BY DISTORTED FLE DAZSO-603, 3/N 3062759, THE FAILURE WAS COMFINED AND IS ATTRIBUTED TO FIRED RESTRAINT DRIFT CAUSED BY DISTORTION IS NOT PRECIDELY KNOWN BUT IT IS BELIEVE TO SE RELATED TO FLUID FLOW DURING STROSCOPE WARM-UP.	ECISELY KNOWN BUT IT I	RESTRAINT DRI	E RELATED	BY DISTORTED FLE TO FLUID FLOW DU	
CORRECTIVE ACTION-NO CORRECTIVE ACTION- AUTOFILOT-SQUARE-A/B 31.V-38-D4-3030 67RO PACKAGE RATE 67RO	CORRECTIVE ACTION. 34.V-38-04-5036F RATE GYRO	FAR 69-45045-1	6507E1 E	E 1	22	*****
DE-OUT OF URTH DIGE ALL MALL BABLE CAU	TOLERANCE. THE PITCH RATE IN-PHASE MALL MAS OUT OF TOLERANCE. THE READOUT WAS NIMUS 0.002 VOLT TUMPEABABLE, THE CHECKOUT PROCEDURE CALLS FOR NOT LESS THAN 0.0022. THE FAILURE REPORT WAS NOT READINGS WERE WELL WITHIN TOLERANCES. NO CAUSE FOR THE FAILURE INDICATION COULD BE DETERMINED. THE IS AM ETR TEST BET MALFUNCTION.	E MALL MAS OUT OF TOLES RECALLS FOR NOT LESS '	ANCE. THE REA HAN D.DOZE. T HLURE INDICAT	DOUT MAS HE FAILUR IOM COULD	HINUS 0.002 VOLT E REPORT WAS NOT BE DETERMINED. T	· .
CORRECTIVE ACTION-NO O	CORRECTIVE ACTION-NO CORRECTIVE ACTION. ETR PERSONNEL MANE BEEM INFORMED OF THE RESULTS OF THIS FAILURE AMALTSIS AN MERE MADE AMARE OF THE POSSIBLE TEST SET MALFUNCTION.	HAVE BEEN INFORMED OF	THE RESULTS O	F TH18 FA	ILURE AMLTBIS AM	
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ODE CRE O SED BY 1H OTT OTT NTAMINATI NO-40 31 THE WI TEAT EQU	MIAHIMATI MIAHIMATI MIAHIMATI MIAHIMATI MADE O SI G. THE VI TEST EQU TEST EQU TEST EQU
NTANIMATI NTANIMATI NTANIMATI NTANIMATI NTANIMATI NTANIMATI NTANIMATI NTANIMATI NTANIMATI	MIANIMII MIANIMII MO-CO 31 C. THE VI TEST EQU MAS DUE T S/N 30033
FAR 151D ETR YES KEARFOTT 55-41002-648 650623 36 HO SS-41002-648 650623 36 HO HO TOR TAILURE TO TORQUE. FAILURE WAS CAUSED BY CONTAMINATION A GLASS CHIP. TON PROCEDURE TO CHECK FILLING APPARATUS PRIOR TO FILLING GYROR WITH PLOW PROCEDURE TO CHECK FILLING APPARATUS PRIOR TO FILLING GYROR WITH PLOW OF SPIN-HOTOR POWER, A SPIN-HOTOR ROTATION- DETECTOR (SHPD) NO-GO 31 OW/IRHED AND WAS CAUSED BY A BURNED OPEN CIRCUITED SHRD MINDING. THE WILLIAMING AT SOME UMBETZANINED THE AND PLACE. TO SHRD. YE TEST PROCEDURE CHANGES MERE INITIATED, CAUTIONING TEST EQUITION AT SOME UMBETZANINED THE AND PLACE. TO SHRD. THE STATE OF THE STATE OF TAILORY TEST EARPOTT FAR	INE. 6TRO IN/D FOR FAILURE TO TORQUE. FAILURE WAS CAUSED BY CONTANIMATION A GLASS CHIP. TOW PROCEDURE TO CHECK FILLING APPRANTUS PRIOR TO FILLING GYROS WITH PLOW PROCEDURE TO CHECK FILLING APPRANTUS PRIOR TO FILLING GYROS WITH PLOW PROCEDURE TO CHECK FILLING APPRANTUS PRIOR TO FILLING GYROS WITH PLOW OF SPIN-HOTOR POWER, A SPIN-HOTOR ROTATION- DETECTOR (SWED) NO-EO SI OWNINGED AND WAS CAUSED BY A BURNED OPEN CIRCUITED SWED WINDING. THE WILLICATION AT SOME UNDETTERMINED THE AND PLACE. FAR STORY COLLS. FAR STORY FACTORY TES REARPOTT TO SHEAPOTT TO SWELL THE FAILURE WAS CONTINUED AND WAS DUE TO SHENT SPLICE IN THE PITCH FIRE PARCEMENT SYRO (P/N P-04250-801, 2/M 5003)
THE, 6TRO IR/D FOR FAILURE TO TORGUE, FAILURE WAS CAUSED BY CONTAMINATION A GLASS CHIP. TON PROCEDURE TO CHECK FILLING APPARATUS PRIOR TO FILLING GYROB WITH PLOW PROCEDURE TO CHECK FILLING APPARATUS PRIOR TO FILLING GYROB WITH PLOW OF SPIN-HOTOR POWER, A SPER-HOTOR ROTATION- DETECTOR (SWED) NO-6O 31 OW/IRRED AND WAS CAUSED BY A BURNED OPEN CIRCUITED SWED WINDING. THE WILLICATION AT SOME UIDETZAMINED TIME AND PLACE. TO UMARE STOPP COILS. FAR 650-4EDGE-913	THE, GTRO IR/D FOR FAILURE TO TORQUE, FAILURE WAS CAUSED BY CONTAMINATION A GLASS CHIP. TON PROCEDURE TO CHECK FILLING APPRANTUS PRIOR TO FILLING GYROB WITH FL. TON PROCEDURE TO CHECK FILLING APPRANTUS PRIOR TO FILLING GYROB WITH FL. TON OF SPIN-MOTOR POWER, A SPIN-MOTOR ROTATION- DETECTOR (SMPD) MO-60 SI ON OF SPIN-MOTOR POWER, A SPIN-MOTOR ROTATION- DETECTOR (SMPD) MO-60 SI ON OF SPIN-MOTOR POWER, A SHIN-MOTOR ROTATION- DETECTOR (SMPD) MO-60 SI ON OF SPIN-MOTOR POWER, A SHIN-MOTOR ROTATION- DETECTOR (SMPD) MO-60 SI COF SYSO YE TEST PROCEDURE CHAMES MERE INTITATED, CAUTIONING TEST EQU TO SMS (STAFF COILS) FAR 69-420GR-813 INOPERATIVE PITCH FINE HEATER, THE FAILURE WAS CONFIRMED AND WAS DUE THENET SPLICE IN THE PITCH DISPLACEMENT SYRO (P/M T-DARSD-803, 3/M 3003)
TON PROCEDURE TO CHECK FILLING APPRANTUS PRIOR TO FILLING GIROS WITH FL. FAR 850619 FACTORY TES R7-04574-3 MO ON OF SPIN-HOTOR POWEN, A SPIN-HOTOR ROTATION- DETECTOR (SMPD) NO-60 31 OWTRHED AND WAS CAUSED BY A BURNED OPEN CIRCUITED SMRD WINDING. THE WILLICATION AT SOME UMBETZAMINED THE AND PLACE. OF SYND YE TEST PROCEDURE CHANGES MERE INITIATED, CAUTIONING TEST EQU TO SMRT STOPF COILS. FAR 850618 FACTORY YES KEARPOTT 69-42502-913	TON PROCEDURE TO CHECK FILLING APPRANTUS PRIOR TO FILLING GYROS WITH PLEASED PROCEDURE TA BENEATH BOOK TO SPIN-HOTOR POWER, A SPIN-HOTOR ROTATION- DETECTOR (SMPD) NO-KO BIONALINGED AND WAS CAUSED BY A SURNED OPEN CIRCUITED SMRD WINDING. THE WILLCATION AT SOME UNDETZRHINED TIME AND PLACE. TO SMRG. SACP OLLS. FAR BOOKEDING CHANGES MERE INTITATED, CAUTIONING TEST EQUITO SMRG. SACP COLLS. FAR BOOKED THE PLACEMENT THE FAILURE WAS CONFIRMED AND WAS DUE TEMENT SPLICE IN THE PITCH DISPLACEMENT SYRO (P/N T-DARSO-SOL). SAN SOOS)
FAR 850619 FACTORY YEB RT-04574-3 NO ON OF 3PIN-HOTOR POWEN, A SPIN-HOTOR ROTATION- DETECTOR (3MPD) NO-60 31 OW/IRMED AND WAS CAUSED BY A BURNED OPEN CIRCUITED SWRD WINDING. THE WILLICATION AT SOME UMBETZAMINED THE AND PLACE. OF 37RO YE TEST PROCEDURE CHANGES MERE INITIATED, CAUTIONING TEST EQU TO SMRG STOPP COLLS. FAR 850618 FACTORY YES KEARPOTT 68-42008-913	FAR 850619 FACTORY YEB RT-04574-3 ON OF SPIN-HOTOR POWER, A SPIN-HOTOR ROTATICH- DETECTOR (SMPD) NO-60 31 OWIRNED AND WAS CAUSED BY A BURNED OPEN CIRCUITED SMRD WINDING. THE WILLCATION AT SOME UNDETZRMINED TIME AND PLACE. TO SMRG STORY TEST PROCEDURE CHANGES MERE INTITATED, CAUTIONING TEST EQU TO SMRG STORY COLLS. FAR 850618 FACTORY YES REARFOTT 69-42018-813 69-42018-813 FAR 850618 FACTORY YES REARFOTT 68-42018-813 EMENT SPLICE IN THE PITCH DISPLACEMENT SYRO (P/N T-04250-601, 3/N 5003)
ON OF SPIN-HOTOR FOMEN, A SPIN-HOTOR ROTATION- DETECTOR (SMPD) NO-40 31 OMFIRED AND MAS CAUSED BY A BURNED OPEN CIRCUITED SMRD MINDING. THE WI LICATION AT BONE UNDETZANINED TIME AND PLACE. OF SYNON YE TEST PROCEDURE CHAMES MERE INITIATED, CAUTIONING TEST EAU TO SMALL SACPE COLLS. FAR 65-4EDGE-813	ON OF SPIN-MOTOR POWER, A SPIN-MOTOR ROTATION- DETECTOR (SHPD) MO-EO SI LICATION AT BONE UMBETZANINED THE AND MLACE. OF 3740 YE TEST PROCEDURE CHANGES MERE INITIATED, CAUTIONING TEST EQU TO SMALL SIGHT COLLS. FAR 65-6008-813 I INCHERATIVE PITCH FINE HEATER, THE FAILURE WAS CONFIRMED AND WAS DUE T EMENT SPLICE IN THE PITCH DISPLACEMENT SYRO SP/N T-04250-801, 3/N 5003)
OF 3740 "E TEST PROCEDURE CHANGES MERE INTITATED, CAUTIONING TEST EQU. TO JUME INCIP. COLLS. FAR 65-4EDGE-813 66-4EDGE-813	OF 3740 'Y TEST PROCEDURE CHANGES MERE INTITATED, CAUTIONING TEST EQUITO JUNE INCREMENTATION OF STATE
FAR 650610 FACTORY TES REARFOTT	
	AN INCPERATIVE PITCH FINE HEATER. THE FAILURE WAS CONFIANED AND WAS DUE T ELEMENT SPLICE IN THE PITCH DISPLACEMENT 6YRO (P/N T-04230-801, 3/N 5003)

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	TEST/REPORT NUMBER	DIP DATA BOURCE	VEHICLE SITE	17. O. F.	PRI VENDOR MANE OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/9	SLV-89-04-504EF RATE GTROSCOFE.	FAR 87-04574-5	019059		YES HOMETWELL NO JRBIDIAS	99908
FAILURE MODE-OUT OF TO FAILURE MAS MOT COMFIR	FAILURE MODE-OUT OF TOLERANCE-THE RATE GYROBCOPE CLOCKWISE STOP APPEARED TO BE BELOW THE ALLOMABLE LOMER LINIT, THE FAILURE MAS NOT COMFIRMED AND NO CAUSE FOR THE FAILURE REPORTED WAS FOUND DURING OR AFTER DISASSEMBLY.	WISE STOP APPEARED TO REPORTED WAS FOUND DU	BE BELOW THE RING OR AFTER	ALLOMABLE DIBASBEN	LOWER LINET. THE BLY.	
CORRECTIVE ACTION-NO CORRECTIVE ACTION.	ORRECTI VE ACTION.					
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	LV-88-04-5038F DISPLACEMENT GVRO	FAR 7-04E50-603	630619	FACTORY	YES KEARFOTT MO C70-2504-000	910269
FAILURE MODE-OUT OF TO AILURE MAS COMPIRMED. T B CAUSED BY FLUID FLOM	FAILURE MODE-OUT OF TOLERANCE-DURING CHECKOUT OF THE GYROSCOPE PACKAGE, THE GYROSCOPE EXMIBITED A HIGH DRIFT, THE F AILURE MAS CONFIRMED. THE EXACT CAUSE IS HOT AHOMN BUT IT IS BILIEVED THAT THE FAILURE MAS DUE TO DISTORTED FLEXLEAD B CAUSED BY FLUID FLOM DURING GYROSCOPE MARM-UP.	PROSCOPE PACKAGE, THE IT IS STLIEVED THAT TH	E FAILURE WAS	SBITED A	ENSBITED A HIGH DRIFT, THE F WAS DUE TO DISTORTED FLEXLEAD	
CORRECTIVE ACTION-NO C	CORRECTIVE ACTION-NO CORRECTIVE ACTION. SEE FAR LY-98-04-5031F.	04-5031f.				
AUTOPILOT-SQUARE-A/B	LV-99-04-5037F DISPLACEMENT GYRO	FAR 7-04250-603	450607	FACTORY	YES KEARFOTT NO C70-2508-DDD	\$1060
FAILURE HODE-OUT OF TO COMPTRIBE AND 18 ATTRIBETION IS BELIEVED TO BE	FAILURE HODE-OUT OF TOLERANCE-DURING FACTORY TEST THE DRIFT RATE WAS FOUND TO BE OUT-OF-TOLERANCE. THE FAILURE WAS CONTINE AND IS ATTRIBUTED TO FIXED RESTRAINT DRIFT CAUSED BY DISTOR PLEALEADS. THE CAUSE OF THE FLEXEAD DISTOR ITOM IS BELIEVED TO BE RELATED TO FLUID FLOW DURING GYROSCOPE WARM-UP.	DRIFT RATE WAS FOUND TUSED BY DISTORTED FLEX OSCOPE WARN-UP.	O BE OUT-OF-T LEADS. THE CA	OLERANCE. USE OF TH	THE PAILURE MAS E FLEXLEAD DISTOR	
CORRECTIVE ACTION-NO CORRECTIVE ACTION.	CORRECTIVE ACTION. SEE FAR LV-98-04-5051 F.	04-5031 F.				
AUTOFILOS-BAUADE-A78 GYRO PACKAGE	A-90-04-5028* DISPLACEMENT GYRO	FAR 87-51408-3	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	***	MO REARFOTT	050200
FAILURE MODE-ERRATIC C OUT, COMPLITE FUNCTIONS NO.	FAILURE MODE-ERRAYIC OPERATION. THE GYRO PACKACE EXHIBITED AN INTERHITTENT SPIN-FOTOR ROTATION-DETECTOR (BHED) DROP OUT. COMPLETE FUNCTYONAL AND TENNERATURE CYCLE TEBTS DID NOT CONFIRM THE REPORTED FAILURE. NO DISCREPANCIES NERE FOUND. ND.	ITED AN INTERMITTENT O D NOT CONFIRM THE REPO	PIN-MOTOR ROT RTED FAILURE.	ATTON-DE1 NO 01969	ECTOR (SMED) DROP EPANCIES VERE FOU	
CORRECTIVE ACTION-BING	INCE THE PAILURE MAS NOT CONFIRMED, NO CORRECTIVE ACTION CAN BE TAKEN.	NO CORRECTIVE ACTION	CAM PE TAKEN.		enenga Populariya errengan da babbar da babbar da babbar	
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GENERAL DYNAHICS CONVAIR DIVISION

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DIFFICIALTIEN REVIEW-AUTOPILOT SYSTEM-AIRBORNE

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841161	TEST/REPORT NUMBER PAILED COMPONENT MANE	FIF DATA BOUNCE PART NUMBE 4	VEHICLE BITE DATE DIF TIME DIF	STE DIE	PRI VENDOR HANG OTH WENDOR PART NO	
AUTOFILOT-SQUARE-A/B GTRO PACKALE	6D/C22H65-D16-DA1D49-/L4-7NO-D1-71 COMPOSITE-FRD/DPL D8 SYRO	COMPOST TE-PRD/DPL.	7108 2-4 650520		7E8	****
FAILURE HODE-FAIL BURE	DURING CHERATION. SPIH NOTOR ROTATION DETECTOR INDICATED AN INTERNITTENT GYRO FAULT DURING THE CO	ECTOR INDICATED AN	INTERNITTENT	6780 F	IULT DURING THE CO	
SYSTEM EFFECT-ENRATIC OMERATION.	OPERATION.					
CORRECTIVE ACTION-BOTH	I THE DISPLACEMENT AND REMOTE RATE GYRO GROUPS MERE REPLACED.	O GROUPS WERE REPLA	œ.			, 1
AUTOPILOT-SQUARE-A/8 GTRO PACKAGE	LV-98-04-5031F DISPLACEMENT GYRO-PITCH	FAR 27-41002-455	050519 ETR		YES KEARFOTT	\$ 10801
FAILURE MODE-OUT OF TO RIFT OUTPUT, THE PITCH EAD IN THE PITCH 67RO P	F TOLERANCE-DURING THE FAILURE AMALYSIS OF THE GYRO PACKAGE FOR A REPORTED OUT-OF-TOLERANCE YAW D Ton Chamel Exhibited a High out-of-tolerance drift. This was caused by a distorted Phabe-a flexi, no p/n rt-04230 -003 b/H 308-2771 believed to be due to fluid flow during warm-up.	F THE GYRO PACKAGE : ANCE DRIFT. THIS WA D TO BE DUE TO FLUI	ACKAGE FOR A REPORTED OUT-OF-: THIS WAS CAUSED BY A DISTORTEL TO PLUID FLOW DURING WARM-UF.	ED OUT	SF-TOLERANCE TAM D TYED PHASE-A FLEXL PP.	
CORRECTIVE ACTION-ETR PERSONNEL MERE ECAUSE A DESIGN CHANGE INCORPORATING B CORPORATED ON ALL N.W STNO ASSCHBLISS.	CORRECTIVE ACTION-ETR PERSONNEL WERE NOTIFIED OF THE RESULTS OF THIS ANALYSIS. NO CORRECTIVE ACTION WILL BE TAKEN B ECAUSE A DESIGN CHANGE INCORPORATING BAFFLES NEAR THE PLEALEADS TO PRECLUDE DIPTORTION DUE TO PLUID FLOW MAS BEEN IN CORPORATED ON ALL NEW GING ASSCHBLIES.	S OF THIS AML'SIS. ADS TO PRECLUDE DIF	NO CORRECTE TORTION DUE	76 ACTIV	DH WILL BE TAKEM B) PLOM MAS BEEN IN	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	LV-SB-04-5031F DISPLACEMENT GYRO-YAM.	FAR 27-61002-953	#50310 E7R		YES NO	210500
FAILURE MODE-OUT OF TO	F TOLERANCE-THE YAM DRIFT TEST D34 READING WAS NIMES 0.16TG WHILE THE TOLERANCE 13 PLUS OR HIMUS	G MAS MINUS O.1676	MILE 146 TO	LERAINCE	13 P.US OR HINUS	
CORRECTIVE ACTION-NO C	NO CORRECTIVE ACTION AS THE FAILURE WAS NOT CONFIRMED.	OT CONFIRMED.			Processia in the contract of t	-
AUTOPILOT-BQUAPZ-A/B GTRO PACKAGE	LV-9B-04-5U34F DISPLACEMENT GYRO-PITCH	FA-41002-955	450310 CTR		e o	100
PAILURE HODE-OUT OF TOLERANCE-DURING PITCH NG OF PLUS DISSES WHILE ALLOWBLES ARE PLUS	FAILUNE HODE-OUT OF TOLERANCE-DURING PITCH ORIFT TEST UPS THE PITCH CHAHNEL EXHIBITED A HIGH OUT-OF-TOLERANCE READI 16 CF PLUS DIESTS HHILE ALLOMBLES ARE PLUS OR HIPUS DIDSSS: THE FAILURE WAS NOT CONTRINED:	NE PITCH CHAMBEL EX THE PAILURE MAB NO	HIBITED A HE	2021	OF-TOLERANCE READS	
CORRECTIVE ACTSON-NO C	NO CORRECTIVE ACTION.		agellandrives and the second			
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DIPPICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

H-71878	TEST/SEPOST NUMBER	DIF DATA SOURCE	VEHICLE	SITE PRI VENDOS MANE	
848-8787RM	FAILED CONFONENT NAME	PART NUMBER		T OTH V	
AUTOFILOT-SAUMRE-A/B GTRO PACKAGE	EPC4393 RATE GYRO	UT#- PET E7-04574-5	2/09 016069	YES HINN, HONEYNEL NO L JRS101AS	10024-
FAILURE MODE-CONTAINMATION. DI DO CPS APPLIED TO THE SPIN HOTO FOUND MORNAL. THIS WAS CAUSED	FAILURE MODE-COMPANIMATION. BURING POST IMMERSION TEST PROOF CYCLE C, THE SPIN MOTOR FAILED TO OPERATE WITH 115V, 4 BO CPS APPLIED TO THE SPIN MOTOR WINDINGS. CHECKS OF CABLE HARNESS, CURRENT DRAWN, RESISTANCE OF MOTOR WINDINGS WERE FOUND NORMAL. THIS WAS CAUSED BY FLUID IN GIMBAL BUE TO BEFECTIVE SOLDER SEAL.	OF CYCLE C, THE SPII HARNESS, CURRENT DR/ FECTIVE SOLDER SEAL	H MOTOR PAILED	C. THE SPIN MOTOR FAILED TO OPERATE WITH 115V, 4 CURRENT DRAWN, RESISTANCE OF MOTOR WINDINGS WERE OLDER SEAL.	
CORRECTIVE ACTION-GA AND DESIGN AVE VISUAL EXAMINATION BEFORE ASPRO. OPR. C) LARGER SOLDERING DERING STANDARDS. (E) INSPECTION	CORRECTIVE ACTION-QA AND DESIGN RETURNED GYRO TO VENDOR FOR FAILURE ANALYSIS. HONEYWELL TO UNDERTAKE-A) GIMBAL TO HAVE VISUAL EXANIMATION BEFORE ASSEMBLY TO SCIPE, B) GREATER DETAILS AND METCHES DEFINING ACCEPT. WORK INSTRUCTS. TO PROD. OPR. C) LARGER SOLDERING IRON BEING USED IN GIMBAL SOLDERING FOR BETTER SEAL. D) GA ADDED DETAILED VISUAL. SOLDERING STANDARDS. (E) INSPECTION OF SOLDER JOINTS UNDER XID MACHIFICATION. (F) MASS UMBALANCE TEST.	R FAILURE ANALYSIS. DETAILS AND RETCHE OLDERING FOR BETTER MAGNIFICATION. (F)	HONETWELL TO UNDERTA 18 DEFINING ACCEPT. W SEAL. D) QA ADDED DE MASS UMBALANCE TEET.	HONEYWELL TO UNDERTAKE-A) GIMBAL TO M S DEFINING ACCEPT. WORK INSTRUCTS. TO SEAL. D) QA ADDED DETAILED VISUAL. SOL. MASS UMBALANCE TEST.	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	27C4393 RATE GYRO	UTP-PET 27-04574-5	650507 GD/C	YES MINNHOMEYMEL NO L JRS101A3	200286
FAILURE MODE-OUT OF TOLERANCE. S 0.52 (TEST LIMITS ERUALS 0.35	ERANCE. THE DAMPING RATIO WAS BELOW THE TEST LIMITS AT PLUS 160 DEG. F., DAMPING RATIO EQUAL. LS 0.35 TO 0.95).	THE TEST LIMITS AT	PLUS 163 DEG.	F., DAMPING RATIO EQUAL	
CORRECTIVE ACYTON-FAILU	CORRECTIVE ACVION-FAILURE AMALYSIS AT YENDOR WAS COMDUCTED. FLUID WAS FOUND IN GIMBAL. CIAL MASS UMBALANCE TEST TO DETECT THIS PRCY.EM IN THE FUTURE, REF. CICTH NO. 551-1-002.	MS FOUND 1	IN GIMBAL. HONE) 551-1-002.	HONEYWELL WILL PERFORM A SPE.	
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-5023-F CIRCUIT BOARD TRANSISTOR	FAR 27-41556-3	151F FAC 650421	FACTORY YES NO	894455
FAILURE MODE-ELECTRICAL OPEN. TED 205 SECONOS. FAILURE MAS TON LEAD WAS ALSO MELTED. THIS	OPEN. THE LOW-POWER 1 ASSEMBLY FAILED WHEN SW 4 TRIGGERED AT 200 SECS RATHER THAN THE EXPEC. MAS TRACED TO TRANSISTOR 9-18 (HATSS4) INTERNAL COLLECTOR LEAD WHICH WAS BROKEN. THE JUNCTI THIS SUGGESTS A HIGH VOLTAGE GREATER THAN 80 VOLTS WAS APPLIED FROM AN EXTERNAL SOURCE.	LED "HEH 3W 4 TRIGG 534) INTERNAL COLLE ER THAN 60 VOLTS WA	RED AT 200 SEC TOR LEAD WHICH	S RATHER THAN THE EXPECT WAS BROKEN. THE JUNCTI	
CORRECTIVE ACTION-NO CORRECTIV	RRECTIVE ACTION HAS TAKE AS THE ACTUAL CAUSE OF TRANSISTOR FAILURE IS UNKNOWN.	UAL CAUSE OF TRANSE	STOR FAILURE IS	S UNKNOWN.	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	AGU63-D01-37/FC-CO-01-0071-012	COMPOS I TE-FACTORY	7112 FAC	FACTORY TES NO	†
PAILURE HODE-OUT OF TOLI	failure moe-out of tolerance-during the booster phase the Yaw Gyro end-to-end torquing gain was 50 percent above n Rhal.	YAW EYRO END-TO-EN	TORQUING GAII	HAS SO PERCENT ABOVE N	
STRIEM EFFECT-OPERATION TOO HIGH.	100 HIGH.				
WENTCLE EFFECY-COMPOSITI	WENICLE EFFECY-COMPOSITE RE-SCHEDULED. POST-COMPOSITE TESTINS REQUIRED.	INS REQUIRED.	,		
				PAGE 0237	·1.

GENERAL DYNAMICS CONYAIR DIVISION

11 JUN 1986

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

87.87EH 80.1:-878TEH	TESTARFORT NUMBER FAILED CUMPONENT NAME	DIF DATA SOUPCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	PRI VENDOR NAME OTH VENDOR PART NO	
H-HOM.	DESCREPANCY COULD NOT BE DUPLICATED AND WAS ACCEPTED BY ENGINEERING.	AND WAS ACCEPTED BY	r ENGINEERING.		52968
AUTOFILOT-SQUARE-A/R SYRO PACKAGE FAILURE MODE-OUT OF TOLE BLOMER THAN EXPECTED, RES LOW SAIN ASE MALING AMPL	GD/C AGUES-DD1-34/FC-CO-D1-DDE1-DD COMPOSITE-FACTORY RESD FACTORY NO 3 67RO-D13FLACEMENT E7-41002-855 FOLERANCE, PITCH D135LACEMENT 67RO CLOSED-LOOP TORQUING RESPONSE WAS APPROXIMATELY THREE TIMES APPLIES. THIS DISCREPANCY WAS CAUSED BY A AMPLIFIER.	COMPOSITE-FACTORY E7-4100E-855 D-LOOP TORQUING REI	850-09 FACTORY 850-09 SPONSE WAS APPROXIDES. THIS DISCREPANS	NO HO LATELY THREE TIMES IY IMS CAUSED BY A	
SYSTEM EFFECY-INFROMEN ANALOG SIGNAL. VEHICLE EFFECT-COMPOSITE RE-SCHEDULED	SYSTEM EFFECT-INFROMER ANALOG SIGNAL. VEHICLE EFFECT-COMPOSITE HE-SCHEDULED, POST-COMPOSITE TESTING REQUIRED.	W REGUIRED.			
CORRECTIVE ACTION-REPLACED AGE MALLING	ED ASE MALING AMPLIFIER.				
AUTOFILOT - SQUARE - N/B GYRO PACKAUE	69CE694.2 DISPLACEMENT GYRO	UTP-SLT 7-04230-601	\$50406 6 0/C	NO REARFOIT	779868
FAILURE MODE-OUT OF TOLENANCE. 6 H MAS OUT OF TOLENANCE. 6 CORRECTIVE ACTION-NO PAG	FAILURE WODE-OUT OF TOLERANCE, FOLLOWING SLT VIBRATION (PITCH AXIS, R/S) DURING PROOF CYCLE IN MAS OUT OF TOLEMANCE, GYRO PACKAGE 69-41002-857, REFER TO FAILURE LOG MUNDER 551-01-001. CORRECTIVE ACTION-NO PACRIEN, OUT-OF-TOLERANCE MAS CAUSED BY BUILD-UP OF TEST EQUIPMENT TOLE	TON (PITCH AKIS, R/S) DURING INTER TO FAILURE LOG MUNDER (CAUSED BY BUILD-UP OF TEST (ਤੋਂ ਤੋਂ	A, THE PITCH SIGNAL WATER	
AUTOFILOT SQUARE-A/D	69-2694.2 ROLL RATE GYRO BIND	UTP-5LT 27-04574-5	450404 607C	YES HONEYNELL NO	******
FAILURE MODE-OPEN-ELECTRICAL. OFF IN ROLL RATE GTRO. IN MAIN	FAILURE MODE-OPEN-ELECTRICAL. DURING SLT VIBRATION (PITCH AXIS) R/S) SHED LOGIC GAVE NO-50 DUE FF IN ROLL RATE GYRO, IN MAIN GYRO PACKAGE 69-41002-857, REFER TO FAILURE LOG MUNBER 331-1-001.	KIS, R/S) SHID LOGI ER TO FAILURE LOG		NO-50 DUE TO DAMAGED SHRD PICK 331-1-001.	
CORRECTIVE ACTION-DAMAGE	CCRRECTIVE ACTION-DANAGE BONE TO SHRD PICKOFF IN 6YRO HAS BEEN REDUCED THROUGH CORRECTING/REVISING ALL TEST PROCEDU	IEN REDUCED THROUGH	CORRECTING/REVISIO	6 ALL TEST PROCEDU	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	69CZ604.Z DISPLACEMENT GTROHEATER	UTF-SLT 7-04250-801	650408 6076	YES KESKFOFF NO	
FAILURE MODE-OUT OF TOLE HG. MAIN GING PACKAGE 89-	FAILUME MOCE-OUT OF TOLERANCE. DURING PITCH AXIB R/S VIBRATION ROLL DISPLACEMENT GYRO FINE HEATER VOLTACE WAS VARYE MG. MAIN GYRO PACKAGE 89-41002-657; REFER TO FAILUME LOG NUMBER 551-1-001.	ION ROLL DISPLACEMENTS BER 551-1-001,	NI GTRO FINE MEATE!	NO.TACE WAS VARTE	
CORRECTIVE ACTION-NOT A	CORRECTIVE ACTION-NOT A PROBLEM, HEATER VOLTAGE VARIATION IS HORNAL FOR PROPORTIONAL HEATER CONTROL.	MORNAL FOR PROPOR	TIONAL HEATER CONTI	104.	
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GENERAL DYNAMICS CONVAIR DIVISION

### FOT #4	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	UTOPILOT SYSTEM-AIRBO	7.2				
878TEH 848-878TEH	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	817E 71ME DIF		PRI VENDOR NAME OTH VENDOR PART NO	
AUTORILOT-BRUANE-A/B SYNO PACKAGE	SECRESAIR DISPLACEMENT GYRO	UTF-BLT 7-04850-801	850406	3/03	25 8	TES REARFOTT NO	23443
FAILURE HODE-OUT OF TOL BRATION ENVIRONMENT (6YR	FAILURE HODE-OUT OF TOLERANCE, DURING BLT VIBRATION (PITCH AXIS, R/S) DISPLACENTHI GYRON BRATION ENVIRONMENT (GYRO PACKAGE 68-41002-837), REFER TO FAILURE LOG MUNGER 551-D1-D01.	CH AXIS: R/S) DISPLAC FAILURE LOG NUMBER S	EN CNT EYROB 31-01-001.	NE NE	ģ	DISPLACES ONT GYROS WERE OUT-OF-SYMC DUE TO VI MAGER 551-01-001.	
CORRECTIVE ACTION-LOSS OF 85 OF SYNC UNDER VIBRATION.	CORRECTIVE ACTION-LOSS OF GYRO SYNC DURING VIBRATION IS NOT A TEST DISCREPANCY, AS GYRO SPECIFICATIONS ALLON FOR LO S. OF SYNC UNDER VIBRATICS.	NOT A TEST DISCREPANC	r, AB GYRO	**************************************	110	IS ALLOW FOR LO	**************************************
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	SLV-AB-04-3003-F TMO-RAIT STRO-RESISTOR R-8	FAR 69-45045-1	711E 650319	FACTORY	1 2		***
FAILURE MODE- ELECTRICA FOUND BURNED, PROBABLY C	FAILURE HODE- ELECTRICAL OPEN. THE TWO RATE GYRO PACKAGE MAS IR/O FOR NO OUTPUT. RESISTOR R-S AND OTHER COMPONENTS TOUND BURNED. PROSABLY CAUSED BY EXTERNAL APPLICATION OF HIGH VOLTAGE.	MAS IR/O POR NO OUTPHISH VOLTAGE.	UT. RESIBTO	A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ŧ	ER CONOMINE	
CORRECTIVE ACTION-PERSO	CORRECTIVE ACTION-PERSONNEL CAUTIONED ABOUT APPLYING IMPROPER VOLTAGES.	ROPER VOLTAGES.					
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	St.V-A8-04-3003-F TAC-RATE GYRO-DICDE	FAR 89-45043-1	7112	FACTORY	₽ 9		9009
FAILURE MODE-ELECTRICAL PEM. CAUSED BY EXTERNAL	FAILURE MODE-ELECTRICAL OPEN. THE TWO RATE CYROLEACKAGE MAS INTO-FOR NO-OUTPUT, DIODES CR-172ND CR-27FOUND BURNED O En caused by External Applied Voltage.	MAS_IR/D_FOR-NO-OUTPU	7010068 0	OH: 1-8	#	FOUND BURNEDS O	
CORRECTIVE ACTION-PERSO	CORRECTIVE ACTION-PERSONNEL CAUTIONED ABOUT APPLYING MRONG	HE VOLTAGE.					
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	69CZ694.E ROLL RATZ 67RO 3HRD	UTP-SLT E7-04574-5	650316	5/03	ž š	YES HONEYNELL NO	17000
F IN ROLL RATE GYRO IN N	FAILUME MODE-OPEN-ELECTRICAL. DURING BLT VIBRATION (YAW AXIB, R/S) PARD LOGIC GAVE NO-GO DUE TO DAMAGED BARD PICKOF F IN ROLL RATE GYRO IN MAIN GYRO PACKAGE 69-41002-657. REFER TO FAILUME LOG MUNDER 556-5-010.	AXIB, R/S) PARD LOGIC PER TO FAILURE LOG NU	64VE NO-60 NDER 556-5-	00E TO 1	NA MAG	ED SHED PICKOF	
CORRECTIVE ACTION-DAMAG	CORRECTIVE ACTION-DANAGE DONE TO SARD PICKOPP IN 6780 HAS BEEN REDUCED THROUGH CORRECTING/ REVISING ALL TEST PROCED Res.	8 BEEN REDUCED THROUG	H CORRECTIN	6/ REVIE	*	IL TEST PROCED	
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GENERAL DYNAMICS

AUTOPILOT-SSUARE-A/B	FAILED COMPONENT NAME	PART NUMBER	DATE DIF	\$17E		OTH VENDOR PART NO	9
	BOCESSA.E DISPLACEMENT SYRO	UTP-9LT 7-04250-801	630316	3/03	4 0 ¥	YES REARFOTT	7
FAILURE MODE-OUT OF TO ATION ENVIRONMENT. STRO	OF TOLERANCE, DURING BLT VIBRATION (YAW AKIS, R/S) DISPLACEMENT GYROG MERE OUT-OF-SYNC DUE TO VISA GTRO PACKAGE 89-41002-857, REFER TO FAILURE LOG NUMBER 558-5-010.	ILURE LOG NUMBER 556~	ENT CYROS E	ERE OUT.	0F-8V	K DUE 10 VII	<u> </u>
CORRECTIVE ACTION-LOSS OF 85 OF SYNC UNDER VIBRATION.	G OF GYRO SYNC DURING VIBRATION 18 NOT	NOT A TEST DISCREPANCY, AS GYRO SPECIFICATIONS ALLOW FOR LO	1, A& 67RO	*PECIFIC	917	ALLOW FOR I	0
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	SPCZSD4.2 DISPLACEMENT GYRO	UTP-SLT 7-04250-601	650316	3/0 3	2 <u>2</u>	KEARFOTT	
FAILURE MODE-OUT OF TO MAS OUT-OF. TOLENAME.	OF TOLERANCE, FOLLOWING SLT VIBRATION (YAW AXIS, R/3) DURING PROOF CYCLE A, THE PITCH BIGMAL GAIN Hee. 67ro package 88-41002-837, refer to pailure log marker 356-5-010.	TAW AXIS, R/S! DURING O FAILURE LOG MAMBER	PROOF CYCL 556-5-010.	E A, THE	9.19	1 816HAL 6411	
CORRECTIVE ACTION-NO I	CORRECTIVE ACTION-NO PROBLEM, OUT-OF-TOLERANCE HAS CAUSED BY BUILD-UP OF TEST EQUIPMENT TOLERANCES.	D BY BUILD-UP OF TEST	EQUIPMENT	TOLERANC			
AUTOFILOT - SQUARE - A/B GTRO PACKAGE	5LV-09-04-5001-F ELAPSED TIME METER	FAR 85-31900-005	9080359	FACTORY	YES /	YES A.W. HAYDON	*****
FAILURE MODE-STRUCTURA CAUSED BY JAMMED GEAR!	FAILURE MOE-STRUCTURAL, ELAPSED TIME INDICATOR DID NOT ADVANCE TO INDICATE ABOUT 6 MOURS OF TEST TIME, PAILURE NAS CAUSED BY JAMED GEARS RESULTING PROM INSUFFICIENT MACHING OF THE EDGE OF THE TENTHS GEAR.	ADVANCE TO INDICATE A NG OF THE EDGE OF THE	BOUT & HOUR TENTHS GEA	5 OF TES	Ž.	C. PAILURE W	•
CORRECTIVE ACTION-SUP	-SUPPLIER OF GEARS TO INSTITUTE ULTRASONIC TUMBLING TO ELIMINATE BURRS.	MIC TUMBLING TO ELIM	MIE BURRS.				
AUTOFILOT - SQUAPE - A/B GYBO PACKAGE	CT-88-04-194	FAR 55-41002-647	620218	ETR	2 2		24:110
FAILURE MODE-FAIL DURII TORQUING THE GYROSCOPES OD TRAT THE FAILURE OCCI E PACKAGE OPERATED PROPI MOST PROBABLE CAUSES OF	FAILURE MODE-FAIL DURING OPERATION POWER WAS APPLIED THE APIN HOTOR WOULD NOT RUN. ATTEMPTS TO OBTAIN AN OUTPUT BY TORGUNG THE GYROSCOPES REYEALED NO OUTPUT FROM THE SIGNAL AMPLIFIERS, THE FAILURE WAS NOT CONFIRMED. IT IS UMBERSTO OD THAT THE FAILURE OCCURRED MITH A BANDWICH PLUG IN THE MISSILE, AND UPON REMOVAL OF THE BANDWICH PLUG THE PACKACE OPERATED PROPERLY. WO MEASUREMENT WAS MADE TO DETERMINE IF POORER WAS ACTUALLY APPLIED TO THE PACKACE. THE MODALE CAUSES OF THE FAILURE ARE A FALLITY SANDMICH BOX, A PROCEDURAL ERROR, OR FAULTY HIBSILE WIRING.	APIN HOTOR WOULD NOT LAPLIFIES, THE FAI ED ON THE MISSILE, AN ETERNINE IF POWER WAS I BOX, A PROCEDURAL ES	RUM. ATTEN LURE MAS NO D. UPON REMO ACTUALLY A	FTS TO O T CONFIR WAL OF T PPLIED T	250. 1	AN GUTPUT BY IT IS UNDERS DWICH PLUP PACKAGE, TH	. 2 2
COMBECTIVE ACTION-UNKNOWN.	COMBI.						
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GENERAL DYNAMICS CONVAIR DIVISION

	DIFFICULTIES REVIEW-AUTOFILOT	PILOT STSTEM-AIRBORNE	¥			,
STATES STATES	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VENICLE SITE DATE DIF TIME BIF	PR1	VENDOR HANE VENDOR PART HO	
AUTOFILOY-SQUARE-A/B GYRO PACRAGE	48F34E0 HEATER	UTP-< 85-41002-835	030E14 60/C	. Š		!
FAILURE MODE-OUT OF TOL	F TOLERANCE, DURING ALL AXIS OF BLT (R/S) VIBRATION PITCH AND ROLL FINE HEATER VOLTAGE FLUCTUATED LOS 358-3-508.	VIBRATION PITCH AN	D ROLL FINE HEAT	70 E3	TAGE FLUCTUATED	
CONRECTIVE ACTION-NO RE	MO REQUIREMENT EXIST FOR STABLE WOLTAGE.					
AUTOPILOT-SQUARE-A/B	69F34EG DISMLACENENT GYRO SWRD	UTF-8LT 88-41008-888	#3021# 60/C	ž Q		<u>:</u>
FAILLRE MODE-OUT OF TOX CH SHGD. \$) PITCH AND RC	FAILINE MODE-OUT OF TOLERANCE. DURING ALL AXIS OF SLT (R/S) VIBRATION 1) SAMD LOGIC HAD NO-60, 2) MOISE SEEN ON PIT CH SHOD. 3) PITCH AND ROLL FINE HEATER VOLTAGE VARIED. REPER TO FAILURE LOG MANDER 558-5-008.	VIBRATION 1) SURD TO FAILURE LOG MUN	LOGIC HAD NO-60. BER 556-5-000.	e E	18E SEEN ON PIT	
CORRECTIVE ACTION-1) DA	CORRECTIVE ACTION-1) DANAGE DONE TO SHAD PICKOFF HAS BEEN REDUCED BY REVISING TEST PROCEDURES. E) NOT CONSIDERED A ISCREPANCY SINCE THERE IS NO SPECIFIED NOISE REQUIREMENT AT PACKAGE LEVEL.	EDUCED BY REVIEWS PACKAGE LEVEL.	TEST PROCEDURES.	¥ â	T CONSIDERED A	
AUTOFILOT - SALARE-A/B GTRO PACKAGE	LV-99-04-4999F DISPLACEMENT GYRO MOTOR	FAR 7-04250-803	1960 FACTORY 650212	Y YES	KEARFOTT C7U-2504-D00	00000
FAILUNE MODE-BYRUCTURAL FAILUNE OF THE LUBRICANT	FAILURE MODE-BTRUCTURAL. UNIT REJECTED FOR HAVING AM ERRATIC OUTPUT IN THE BLAVING MODE. FAILURE WAS ATTRIBUTED TO FAILURE OF THE LUBRICANT OF THE SPINNOTOR BEARINGS.	C OÙTPUT IN THE BLA	VING MODE. FAILU	Ä	ATTRIBUTED TO	····
CORRECTIVE ACTION-HOME.	HOME. BINCE THIS BYRO WAS MAMPACTURED THE VENDOR CHAMGED LUBRICANTS, FOR THIS APPLICATION, TO US	E VENDOR CHANGED LU	BRICANTS, FOR TH	TO APP		
AUTOFILOT-SQUARE-A/B GTRO FACRAGE	SLV-99-G4-4997F RATE GYRO TRANSFORMER	FAR E7-04574-3	SSDED4 FACTORY		YES HIMMHOMEY. NO JRS101AR	
FAILURE MODE-SHORY, UNI	UNIT REJECTED WHEN THE PRIMARY WINDINGS WERE FOUND SHORTED TO THE CASE.	HERE FOUND SHORTED	TO THE CASE.			
CORRECTIVE ACTION-NOWE.	. CAUSE OF PAILURE NOT CONTINED.		` .			
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					PAGE DEGS	

GENERAL DYNAMICS CONVAIR DIVISION

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a de la companya de	VENDOR NAME VENDOR PART NO		PLICATION OF E	TES KEARFOTT NO	SPOND TO TORGUNDER SSG-5-007	YES KEARFOIT NO CT02506000	UTED TO A BROK AR SLV-89-04-4 MUFACTURE OF T		ALLATION. ALLATION. 01 MITH PACKAG	PAGE OZGE
-	# 5 2 5	₽ ₽	¥ .	ž 3	TO RE LOS AND AT KEA	£ 5	ATIRIB O ON T	2 × 5	BROKEN C INST	
	\$17E	FACTORY	TAGES.	9	PAILURE I AILURE I THSPECT	FACTORY	REPORTED	5	E DURIN	
1¥	VEHICLE DATE DIF	7£03 650£00	FAILURE WAS ATTRIBUTED TO EXCESSIVE INPUT VOLTAGES.	021030	AEFER TO P	1960	OPEN, FAILU ILAR CASES HCORPORATES	7401	E WAS CAUSE TRESS RELIG 1960, 154	an epistis in property we make a planto
IOPILOT SYSTEM-AIRBON	DIF DATA BOURGE PART NUMBER	7.A.P. 69-41.D.69-3	OF OUTPUT, FAILURE !	UTP-PRT 7-04250-801	ION THE PITCH DISPLACE IN GYRO LEAD WIRE. OR WORNENSHIP. WEN	FAR 7-04250-803	DETERMINED. FOUR SIM	FAR 69-41002-893	HAMEL GAIN. FAILURI NOT PROVIDING FOR B TROSCOPE PACKAGES IN	de gelle signification de de gelle de section de sectio
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	TEST/REPORT NUMBER FAILED COMPONENT NAME	BLV-80-04-4883F BIGNAL AMPLIFIER TRANJISTOR	FAILURE MODE-ELECTRICAL 340RT. UNIT MAS REJECTED FOR LACK OF OUTPUT. FAILURE MAS ATTRIBUTED TO THE APPLICATION OF MCESSIVE IMPUT VOLTAGE MHICH SHORTED THREE TRANSISTORS. CORRECTIVE ACTION-FACTORY PERSONNEL MERE CAUTIONED ON APPLICATION OF EXCESSIVE INPUT VOLTAGES.	69CE694.E DISPLACEMENT GYRO	FAILURE MODE-OFFEN-ELECTRICAL, AT COMPLETION OF MET VIBRATION THE PITCH DISPLACEMENT 6VRO FAILED TO RESPOND TO TORGUING LINGING TO OPEN IN SIGNAL SENCRATOR CIRCUIT, A BREAK IN 6YRO LEAD WIRE, REFER TO FAILURE LOG MUNDER 556-5-DOP. CORRECTIVE ACTION-VENDOR LAID NOTIFIED OF PROBLEM DUE TO FOOR WORNENSHIP, VENDORS CHIEF INSPECTOR AND SHOP FOREMAN COMPLY TO DISTRIBUTE GOLD PARTO OF LEAD WIRE DISCREPANCY AS CORRECTIVE ACTION MEASURE AT REAFFOIT.	LV-99-04-4384F DISPLACEMENT GYRO WIRE	OF THE BROKEN OF THE BROKEN DESIGN CHANCE	BLV-9D-04-4074F AMPLIFIER RESISTOR	FAILURE MODE-STRUCTURAL, UNIT REJECTED FOR VERY LOW ROLL CHANNEL GAIN, FAILURE WAS CAUSED BY A BROKEN INTERNAL COMN ECTION IN A DISPLACEMENT CALIBRATION RESISTOR AS RESULT OF MOT PROVIDING FOR STRESS RELIEF DURING INSTALLATION. CONRECTIVE ACTION-SURVEY 15-63 REQUIRED RETROFIT OF ALL SYROSCOPE PACKAGES IN 1880, 1940, 7104 AND 7401 MITH PACKAGE.	
9961 MOT 91	SYBTEN BUL-BTBTEN	AUTOFILOT-SQUARE-A/B ATRO PACKASE	FAILURE MODE-ELECTRICAL BHORT. UNIT RCESSIVE IMPUT VOLTAGE MHICH BHORTED CORRECTIVE ACTION-FACTORY PERSONNEL	AUTCPILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-OFEN-ELECTRICAL, AT COMPLETI ING INPUTS DUE TO OPEN IN SIGNAL GENERATOR CORRECTIVE ACTION-VENDOR LAID HOTTERD OF	AUTOFILOT - SHUNE - A/B GTRO PACKAGE	FAILURE MODE-OPEN. UNIT EM PHASE A FLEXLEAD. CAUS BESF4881F4984F. CORRECTIVE ACTION-MOME.	HIS UNIT, MAYE REDUCED THE AUTOFILOT-BRUMRE-A/B E STNO PACKASE	FAILURE MODE-STRUCTURAL. ECTION IN A DISPLACEMENT CORRECTIVE ACTION-SURVEY ES COMPLYING WITH NS 44.5	

GENERAL DYNAHICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

TO PACKAGE WHICH STANDARD AND LEASE STANDARD CONCECUTES AND LEASE STANDARD CONCECUTES STANDARD CONCECUTES AND LEASE STANDARD CONCECUTES STANDARD CONCECUTES STANDARD CONCECUTES STANDARD AND LEASE STANDARD CONCECUTES STANDARD AND LEASE STANDARD CONCECUTES STANDARD CONCECUTES STANDARD AND LEASE STANDARD AND LEASE STANDARD AND LEASE STANDARD AND LEASE STANDARD CONCECUTES STANDARD CONCECUTES STANDARD AND LEASE STANDARD AND LEASE STANDARD CONCECUTES STANDARD CONCECUTES STANDARD AND LEASE STANDARD AND LEASE STANDARD AND LEASE STANDARD AND LEASE STANDARD CONCECUTES STANDARD CONCECUTES STANDARD AND LEASE STANDARD AND LEASE STANDARD AND LEASE STANDARD AND LEASE STANDARD CONCECUTES AND LEASE STANDARD CONCECUTES STANDARD AND LEASE STANDARD STANDARD AND LEASE STANDARD AND LEASE STANDARD AND LEASE STANDARD STAN
JECTED LAMEN THE TEST BET GAVE A NO-GO DURING HEXT ASSEMBLY TESTS. FAILURE WAS SPLICE. LECTED LAMEN THE TEST BET GAVE A NO-GO DURING HEXT ASSEMBLY TESTS. FAILURE WAS
INE APPRIACO OF THE FAILURE. BYRICT ADHERANCE TO MELDING PROCEDURES WERE BIRES

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FAILURE MOLE-OUT OF TOLERANCE, GYRO HAD STICTION IN THE NS POSITION OF STICTION TEST, CONDITION MAS GISERYED FOR A MER AFTER SUCESSFULLY PERFORMING THE TEST IN THE WIEN THE CUTPUT OF THE GYRO MAS 4.8 VOLTS, THIS TEST MAS REAUN THREE TE DETENHINED.

18 JUN 1944

GENERAL DYNAMICS CONVAIR SIVISION

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DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRSORNE

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	3	0 40 8 0 40 9	RATIO	44-01-18 PACTORY	i i	BET.C	FACTORY	# 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	į	2/93
VEHICLE DATE DIP	10101	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	, V.	1	o m o r	CAED CAED	2	100	104E	
¥ 6	\$	45.00 M	5	3	A 1LE BEFG	اول اول	32F 41303	EFBL MEA. TO E	3	a la
PART NUMBER	17	ES SH THE WG	7Ea7. (C) CO	11	OR FILTERS F	ICH NERE MAH	1	SHRD) SUBASS TRANSISTOR A EN BELIEVED	JECTED BY TH	
10	UTP-PET 7-04830-808	RAL TIH TOLERA E 18FT/	1111	748 27-04848-3	-DETECT	TERS IN	FAR R7-43186-3	ECTOR 1	IA B RE	7-04230-803
PAILED COMPONENT MANE	273614 Displacement evac	FAILURE HODE-OUT OF TOLERANCE, GYRO EXHIBITED BITCTION BEYERAL TIMES IN THE WG TEST POSITION, IN ADDITION, THE MASS UMBALANCE ALONG THE BRIN REFERENCE AXIS WAS SLIGHTLY OUT OF TOLERANCE AT "8.38 DEG/HOUR ON THE FIRST RUN, THE TEST WED.	CORRECTIVE ACTION- (A) RERUM POST PROOF CYCLE C. (B) CONTINUE LIFE TEST. (C) CONDUCT VIBRATION YEST AFTER LIFE TEST	A-29-04-4608-F DAID FILTERS	FAILURE HODE-OUT OF SMECIFICATION. THREE SPIN-MOTOR ROTATION-DETECTOR FILTERS FAILED TO HEET THE HIMIMUM SPECIFICATION OF 3 DB DIFFERENCE BETWEEN \$16 AND 725 CP8. THESE FILTERS WERE MANUFACTURED BEFORE THE SPECIFICATION WAS INSTITUTED.	CORRECTIVE ACTION-A SURVEY US MIDE TO FIND AND TEST ALL FILTERS WHICH WERE MANIFACTURED BEIORE SEPTEMBER : AAR	A-99-U4-4751F SAMD TRANSISTOR) DURING OPERATION, SPIN HOTOR ROTATION-DETECTOR (SHRD) SUBASSEMBLY E MAS REJECTED MHEN IT HAD NO AND 1833 PULSES PER BECOMD. TROUBLE TRACED TO 83 TRANSISTOR AREA. MODULE DESTROYED DURING FASIUM 82 TRANSISTOR HET ALL OPERATING PARAMETERS. PROBLEM BELIEVED TO BE DUE TO RESISTANCE VALUES THAT METHE	RECOMENDED CHANGE OF RESISTOR VALUES WAS REJECTED BY THE CUSTOMER.	PTCSBB1 UT
M31 474 - Q14	AUTOFILOT-SQUARE-AZE OTRO PACKAGE	FAILURE HODE-OUT OF TOLE UMBALANCE ALONG THE BFIN WAS RE-RUN NITH IN-TOLERA MED.	CORRECTIVE ACTION-(A) REI	AUTOFILOT-BELANE-A/B STRO PACKAGE	FAILURE MODE-OUT OF SMECT TOM OF 3 DB DIFFERENCE BET TED.	CORRECTIVE ACTION-A SURVE	AUTOPILOT-SQUARE-A/B GYRO PACKASE	FAILURE MODE-FAILED DURING OPERATION, SPIN OUTPUT AT 50 WOLTS AND 1833 PULSES PER SECO E ANALYSIS. HOMEVER 63 TRANSISTOR HET ALL OFD DO NOT PROVIDE A POSTIVE TRIGGERING ACTION.	MOME.	AUTOFILOT-BAUARE-A/B P: 6780 PACAASE DI

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

VEHICLE SITE PRI VENDOR NAME DATE DIT TIME DIF OTH VENDOR PART NO	PRESENTATIVE DID NOT REV 892004 NC. 556-5-004.	7Es 85484	G A LABORATORY TEST, WHE INED JOINT IN THE TENTHS	THE PROBLEM.	YES 094463	AUSED BY AGING OF EXCITA	THIS TYPE OF CHANGE IS	7655 NO NO		FACTORY YES HINNHONETHEL 805030	REVEALED A PIVOT BEARING WITH AN IMPR PROVEN, THE FAILURE IS ATTRIBUTED TO		
VEHICLE SI	9 BY 0.P.1. RE!	CAIRIG ETA	REJECTED DURING IPPAGE AT A BTJ	ETER VENDOR OF	641216 ETR	NCE. FAILURE C	ENT CHANGE ARE	841214 WTR		7110 FAC	REVEALED A PI PROVEN, THE P.		
DIF DATA SCURCE	ACILITY AND WITHERSEL	FAR 85-31800-020	P/N 69-45045-1, WAS URE WAS RESULT OF SL.	IF THE ELAPSED TIME M	FAR 69-41002-635	GH AND CUT-OF-TOLERA	ABSIFIED AS IMPROVEM	FAR 69-4100E-887	E LOW RATE GAIN.	FAR 87-04574-5	PARTIAL DISASSEMBLY MEM NOT CONCLUSIVELY		
TESTACPORT NUMBER	CORRECTIVE ACTION-TEAR DOWN AMALYSIS OF BYRO ST VENDORS FACILITY AND WITNESSED BY O.P.I. REPRESENTATIVE DID NOT REV AL ANY DISCREPANT CONDITIONS. NO FURTHER ACTION. LOT & ACCEPTED FOR PRODUCTION. REF. CTCTH NG. 556-3-004.	SLV-68-04-4965F ELAPSED THE METER GEAR	FAILURE HODE-STRUCTURAL. THE TWO RATE GTROSCOPE PACKAGE, P/H 69-43045-1, WAS REJECTED DURING A LABORATORY TEST, WHE 1 the Elapsed Time Heter was hoted to be inoperative. Failure was result of slippage at a staked joint in the Tenths Dial Geartraim.	CORRECTIVE ACTION-RAR SLV-98-04-8017 MAS ISSUED, INFORMING THE ELAPSED TIME HETER VENDOR OF THE PROBLEM.	SLV-98-04-5004 DISPLACEMENT GYRO TRANSFORNER	TOLERANTE. DISPLACEMENT GAING MERE MIGH AND OUT-OF-TOLERANCE. FAILURE CAUSED BY AGING OF EXCITA OTHER COHPONENTS:	CORRECTIVE ACTION-MONE, PROPOSED CORRECTIVE ACTION WAS CLASSIFIED AS IMPROVEHENT CHANGE ARE THIS TYPE OF CHANGE IS DI APPROVED FOR PRESENT AUTOPILOT.	BLV-80-04-4967F	OF TOLERANCE. UNIT REJECTED FOR EXCESSIVE LOW RATE GAIN.	BLV-89-04-4972F RATE 6YRO BEARING	FAILURE MODE-BTRUCTURAL. UNIT REJECTED FOR DRIFTING MULL. PARTIAL DISASSEMBLY REVEALED A PIVOT BEARING WITH AN IMPR OPER FIT IN 178 JOURNAL: AS MELL AS ALED BEING COCKED. THOUGH MOT CONCLUSIVELY PROVEN, THE FAILURE IS ATTRIBUTED TO THE DEARING COMDITION.	CORRECTIVE ACTION-NOME, EXACT CAUSE WAS NOT DETERMINED.	
A A T T T T T T T T T T T T T T T T T T	CORRECTIVE ACTION-TEAR EAL ANY DISCREPANT CONDI		FAILURE HODE-STRUCTURAL N THE ELAPSED THE HETER DIAL GEARTRAIM.	CORRECTIVE ACTION-RAR S	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLERANCE, DISPLAY TION TRANSFORMER AND OTHER COMPONENTS.	CORRECTIVE ACTION-MOME, PROPOSED C MOT APPROVED FOR PRESENT AUTOPILOT.	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-OUT OF TOLERANCE, UNIT REJECTED F.	AUTOPILOY-SQUARE-A/B GTRO PACKAGE	FAILURE MODE-STRUCTURAL OPER FIT IN 1TS JOURNAL! THE BEARING COMDITION.	CORRECTIVE ACTION-NOME.	Manager and the second

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

BUB-BYSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	VEHICLE BITE DATE DIF TIME DIF	# 5 0	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOPILOT-SQUARE-A/B	CAPSANIE-088/PG-LG-01-0AC4	COUNTDOM	1400	38A -12000	♀ ♀		•
FAILUME MODE-ERNATIC OF	FAILUME MODE-ERRATIC OPERATION. ATLAB AUTOPILOT SPIN MOTOR ROTATION OUTPUT DETECTION LIGHT INTERMITTANT THROUGH UMB LICAL PIDDI.	R ROTATION OUTPUT DETI	11 MOIL 11	HT INTER	M1 77	NT THROUGH US	
FECT-ENRATIC O	SYSTEM EFFECT-ERRATIC CFERATION. INTERMITTANT SMED OUTFUT INDICATION.	INDICATION.					
	VENICLE EFFECT-COUNTDOMM DELAYED AT T-ROO UNDETERMINED ANGUNT OF TIME. CORRECTIVE ACTION-PIDGE WAS PULLED AND CLEANED WITH ALCONOL AND REINSTALLED. NO PURTHER INTERHITTANT INDICATIONS NE	OUNT OF TIME. OL AND REINSTALLED. M	FURTHER	INTERNIT	TANT	INDICATIONS NE	
RE GBSERVED. AUTOFILOT-SAUARE-A/B GTRO PACKAGE	3L.Y-99-04-4643F 3HRU	FAR E7-04574-3	156D 641203	FACTORY	2 2	HOME YMELL 27-04574-3	•
FALLURE MODE-OUT OF TOL. GMET. THE MAGNET CAN BE I GYROSCUPE PACKAGE, ON TI	FAILURE MODE-OUT OF TOLERANCE, SHED NO-GO INDICATION WAS NOTED. PROBABLY CAUSED BY A PARTIALLY DEMAGNETIZED SHED MA HET, THE MAGNET CAN BE DEMAGNETIZED BY APPLICATION OF EXTRANEOUS VOLTAGES TO SHED COIL, DURING CHECKOUT OF THE MAIN GYROSCUPE PACKAGE, ON TEST SETS TETSD85.	NOTED. PROBABLY CAUSE RANEOUS VOLTAGES TO SP	BY A PAI	TTALLY D	ENTE	ETIZED SHED MA UT OF THE MAIK	
CGRECTIVE ACTICH-FOR DO TO ADD A SHED PROTECTION ON TO TEST EQUIPMENT OF CED. THE SHED CIRCUIT CH.	CORRECTIVE ACTION-FER DESIGN MEMO 556-50-193, IN ANSWER TO RAR 9LV-99-04-3863 WAP NOSIDD? AND ECP7859 WERE INITIATE D TO ADD A SWED PROTECTION CIRCUIT TO EACH GYROSCOPE, ON MARCH 1, 1964 TEST FROCEDRE CHANGES WERE ADDED WHICH CAUTIONED FROM THE REJECTION RATE HAS SIMCE BEEN REDUCED. THE SHED CIRCUIT CHANGE IS CONSIDERED ECONOMICALLY UNFEASIBLE, WAP AND ECP WERE WITHDRAWN AUGUST 10, 1854.	O FAR SLV-99-04-3863 NARCH 1, 1964 TEST FROC SHOD PICKOFF COLLS. Tr FEASIBLE. WAP AND ECP	AP NOSIDI EDURE CHA RERECTI	INCES WER	F7859 E ADD HAS & CUST	WERE INITIATE ED SMICH CAUTI INCE BEEN REDU ID: 1954.	
AUTOFILOT-SELARE-A/B	SLV-89-04-4643F SMED CIRCUIT BOARD	84 - 644 W 4 - 7 M	441203	*ACTORY	YES 60/A NO	٧/٥	•
WODE-ELECTRICAL OF FAILURE IS THE IMPUT TRANS	FAILURE MODE-ELECTRICAL SHORT. SARD 60 LIGHT FAILED TO ILLUMINATE OH THE CHECK OUT TEST SET. EXPERIENCE INDICATES T HAT CAUSE OF FAILURE IS THE APPLICATION OF EXTRANEOUS VOLTAGE TO THE SHRD IMPUT. AN IMPUT DIODE IN SUBASSEMBLY 1 MAS SHORTED. THE IMPUT TRANSISTOR 4-1 HAD A VERY LOM GAIN. THE BASE-EMITTER JUNCTION HAS LEAKY.	LUMINATE OH THE CHECK AGE TO THE SHRO INPUT. E BASE-ENITTER JUNCTI	OUT TEST AN IMPU M MAS LEA	SET. EXP	23 E E	CE INDICATES T ASSEMBLY 1 MAS	
CORRECTIVE ACTION-AM ANIMERE IMITIATED TO ADD A E INITIATED CAUTIONING TI RCUIT CARNEE MAS CONSIDER THE WAR AND ECP WERE US	COMPECTIVE ACTION-AN ANSWER TO BAR BLY-89-D4-3865 WAS RECEIVED OCTOBER 5 1964 STATING THAT WAP MOSIDGT AND ECP 7859 WERE INITIATED TO ADD A SHAD PROTECTION CIRCUIT TO EACH GYROSCOPE, ON MARCH 1, 1964 GYROSCOPE PROCEDURE CHANGES WERE INITIATED CAUTIONING TEST EQUIPMENT OPERATORS ABOUT DAMAGE THAT CAN OCCUR TO SHAD PICKOFF COILS, THE PROTECTIVE CIRCUIT CHANGE WAS CONSIDERED ECONOMICALLY UNFERSIBLE, SINCE THE REJECTION RATE HAD BEEN REDUCED BY PROCEDURE CHANGES. THE WAS AND ECO WERE WITHDRAMM AUGUST 10, 1964, REFERENCE DESIGN MENO 588-50-193.	EIVED OCTOBER 5 1964 1 YROGCOPE, ON HARCH 1, SE THAT CAN OCCUR TO 8 THE REJECTION RATE HA DESIGN NEWD 358-50-18	TATING THE STATE OF THE PICKE	ACOFE PROPERTY COLLS	08100 00EDU 7 THE	7 AND ECP 7859 RE CHANGES WER PROTECTIVE CI EDURE CHANGES.	
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	alan danaman dan da dan da	elitelija i kiristerija, in statelija i jupa Persterenja komuna, ipanispaja nemeta esta i	-	-		PAGE 0268	- -3

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

AT STATE	TEST/REPORT NUMBER DIF DATA SOURCE V	DIF DATA SOURCE PART NUMBER	EHICLE ATE DIF	SITE PRI VENDOR NAME	
AUTOFILOT-SQUARE-A/B GYRO PACKASE	LV-08-04-1055F BMGD FILTER	FAR 87-41002-859	641127 ETR	7£\$ £0/C	****
PATLURE WODE-OUT OF T	FAILURE MODE-OUT OF TOLEMANCE. SHAD DROPOUT WAS CAUSED BY AN IMPROPER SCLDER COMMECTION INSIDE A SHAD FILTER.	AN IMPROPER SCLDER	CONNECTION INSIDE	A SHED FILTER.	
CORRECTIVE ACTION-IN ERS ON SHID BOARDS CAN APPROVE ANY SHRD CIRCUM	CORRECTIVE ACTION-IN ANSWER TO RAR LV-98-D4-8014 STATES THAT WEAPONS AND LV MIBSILES HAVING CANNISTERS WITH -: FILT ERS ON SHID BOANDS CAN HOT BE REFLACED BY -S FILTERS WITHOUT AN ECP DRAWING CHANGE. AIR FORCE CHANGE BOAND WILL HOT APPROVE ANY SHID CIRCULTRY CHANGES, ALL SHED BOANDS MADE AFTER APRIL 10, 1962 USED THE 27-D4948-S FILTERS. ALL 27-D4 B48-1 FILTERS WERE THEN REPLACED WITH -S BECAUSE THE -1 HAD A HIGH FAULTY BOLDER COMMECTION FAILURE RATE.	IAT NEAPONS AND LV M IT AY ECP DRAWING CH. TER APRIL 10, 1962.	IBBILEB HAVING CA INGE. AIR FORCE CA INED THE 27-DA946 ER COMMECTION FAI	WAISTERS WITH -1 FILT ARMEE BOARD WILL MOT -3 FILTERS. ALL E7-D4 LURE RATE.	
AUTOFILOT-SQUARE-A/B	SLV-AN-O4-4959F RATE GYRO SPIN MOTOR TRANSFORMER	FAR 69-41002-647	7401 FACTORY \$411£5	r YES NO	************
FAILLRE MODE-STRUCTURAL. WE SPIN HOTOR TRANSFORMER A BENT PIN IN A COMMECTOR.	FAILURE MODE-STRUCTURAL. WHEN POWER WAS APPLIED, THE CIRCUIT BREAKERS ON THE GROUND POWER SUPPLY TRIPPED. A DEFECTI E SPIN NOTOR TRANSFORMER CAUSED THE FAILURE, REABON FOR TRANSFORMER FAILURE WAS NOT FOUND, BUT COULD BE RELATED TO . BENT PIN IN A COMMECTOR.	IIT BREAKERS ON THE . IANSFORMER FAILURE W	CROUND POMER SUPPLY SUT FOUND, BUT	LY TRIPPED. A DEFECTI COULD BE RELATED TO	
COGRECTIVE ACTION-THE	CORRECTIVE ACTION-THE BENT PIN IN THE THO-RATE STROBCOPE PACKAGE WAS REPAIRED.	ACKAGE WAS REPAIRED			
AUTOPILOT - SQUARE-A/B	3LV-99-04-4952F AMPLIFIER TRANSFORMER	FAR 27-04178-1	7116 FACTORY	1 YES CECO NO 7340	982545
FAILURE MODE-SHORT, E AMALYSIS DID MOT REVEA	FAILURE MODE-SMORT, ELECTRICAL. NO GUTPUT FROM THE AMPLIFIER DUE TO A SHORTED QUIPUT TRANSFORMER. CAUSE HOT RNOWN. MALYSIS DID MOT REVEAL ANY ABNORMALITIES OF OPERATION OF THE TRANSFORMER.	ER DUE TO A SHORTED THE TRANSFORMER.	CUITEUT TRANSFORM	ER. CAUSE HOT KNOWN.	
CORRECTIVE ACTION-NON	ON-NOME. IF THE ENTIRE AMPLIFIER ASSEMBLY HAD BEEN SENT IN FOR AMALYSIS RATHER THAM JUST THE TRANSFO INDICATION COULD HAVE BEEN PRESERVED.	AD BEEN SENT IN FOR	AMILYBIB RATHER	THAN JUST THE TRANSFO	:
AUTOFILOT - NGUARE - A/B GYRO PACKAGE	SLV-99-04-4957F RATE 67ROGCOPE	FAR 27-04374-5	TIEE FACTORY	Y YES HOMETMELL NO JRSSOIAS	***
FAILURE MOSE-OUT OF T MOMENT ASING.	FAILURE MOE-OUT OF TOLERANCE. HIGH MULL OF 21.7 MV. MAXIMUM ALLOMABLE IS 20 MV. FAILURE IS ATTRIBUTED TO NORMAL CO BFORENT AGING.	MM ALLOMABLE IS ED	KY. PAILUME 18 AT	TRIBUTED TO NORMAL CO	
CORRECTIVE ACTION-PER	ON-FER AN ADDITION TO THE PAILUPE ANALYSIS NAIVER TWY ON JANUARY 18, 1965 THE FUTURE FAILURE ANALYSI For a high mull of 30 mV on Lebs.	MIVER TWX ON JAHM	NY 18, 1965 THE P	UTURE FAILURE ANALYSI	
distribution designation of the contract of th				PARK PARK	·
				LED 9ALI	7

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GENER. DYNAHICS CONVAIR DIVISION

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AUTOFILOT - SQUARE-

BYRO PACKAGE

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ENDOR NAME

AT CORRECT SP TO BE INDPE FAILURE MODE-STRU EED: FAILURE MAS A RATING: THE PROPOR CORRECTIVE ACTION-NO ACTION RESULTED FROM THE HEATER MALFUNCTION. TO REDUCE THE NUMBER OF BAD WELDS, A HOLDING FIXT URE WAS MADE FOR TESTING IN LINE WELDS. NEW POINTING MOLDS FOR THE RT-ASSES AND RT-ASSES HODILES ARE GEING USED. THE POACR SUPPLY FOR MELDS WAS DELETED BY HS 43.DTES ON SEPTEMBER 16, 1944. MS43.DTF EATED MARCH 16, 1944. MS43.DTF EATED WAS TENDER AND ELIMINATION OF SE **₽ ₽** # C411E3 27-41002-958 LV-98-04-4941F RATE GYRO SHRD AUTOFILOT - SQUARE - A/B ACK WELDING. GYRO PACKAGE

55555

FAILURE HODE-FAIL DURING OFERATION, SHED INDICATOR BLINKED ON AND OFF AT A RANDON RATE, CAUSE WAS A LOW OUTPUT OF T HE YAW BATE GYROSCOPE, THIS WAS DUE TO A PARTIALLY DEMACRIZED SHED MACHET, DEMANETIZATION RESULTED FROM MOLTAGE AP PLIED TO SHED WINDING, SOURCE OF WOLTAGE UNKNOWN BUT THOUGHT TO BE ETR.

CORRECTIVE ACTION-SINCE CERTAIN TEST PROCEDURES WERE MADE IN MARCH 1944 THE REJECTIONS IN THIS MODE HAD BEEN REDUCE

THE PARTY OF THE PROPERTY AND THE PARTY OF T						_
AUTOPILOT - SQUARE - A/B	34.V-A9-04-4942F	FAR	7100	7108 FACTORY YES	*	=_
GYRO PACKAGE	RATE SYNO BEARINGS	68-45045-1	4 1111		₽	
den a des						
GIO CARDITATION STREET	ACTIONS ACCOUNTS OF THE CASE OF THE SAME CIRCUIT HAD NO CUTPUT. FAILURE IS ATTRIBUTED TO THE RATE GYROSCOFES HOTOR	NO OUTPUT. FAILURE 18	ATTRIBUTED 1	O THE RAT	E GYROSCOPES MOT	8

19261

FAILURE MODE-FAIL DURING OPERATION, THEN LINCOLD AND CONTROL FAILURE OF INPROPER BEARING LUBRICATION, BEARINGS CHICAGE BEARING, COLLD MAYE BEEN CONTAMINATED. THIS UNIT IS THEE YEARS OLD.

CORRECTIVE ACTION-PER RAR BLY-AB-D4-3987 THE VENDOR WAS INFORMED OF THIS FAILURE AS IT INDICATES A POTENTIAL PROBLE

	WEXT ASSEMBLY NOT COMFIRM
2 9	4 8 4 8
MAILLY PACTORY TES	CONDUCTED
41117	0.40 741.00
# - ## ## ## ## ## ## ## ## ## ## ## ##	FAILURE MODE-OUT OF TOLEARME, DURING TEBTS PER FOURMENT OPERATING PROCEDURE \$50.483 CONDUCTED ON A MEXT ASSEMBLY. THE SPIN-WOTOR ROTATION-DETECTOR (SHED) SUB-ASSEMELY B COULD NOT BE CALISRATED. PAILURE ANALYSIS COULD NOT CONFIRM THE FAILURE, NO CAUSE FOR THE FAILURE COULD BE FOUND.
CT-\$QUARE-A/8 CT-98-04-187	FAILURE MODE-OUT OF TOLEAANCE, DURING TESTS PER FOUR THE SPIN-MOTOR ROTATION-DETECTOR (SMRD) SUB-ASSEMELY THE PAILURE COULD SE FOUND.
AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF THE SPIN-MOTOR ROTAT THE FAILURE, NO CAUSE

					A MAN WOOD IN	
CORRECTIVE ACTION-MONE, AUTOFILOT-SQUARE-A/B GTRO PACRAGE	GD/ARGURS-001-27/FC-CO-01-0071-007 COMPOSITE-PACTORY SARD	D7 COMPOSITE-PACTORY	7107	22		02866
FAILUME HODE-FAILED DU	FAILURE HODE-FAILED DURING OPERATION, TELENETRY MEASURENENT B384X INDICATED A NO-60 SHED AT MOMER CHANGEOVER (INTER Ble and external), ground ac pomer bupply phabing had been reversed.	NT BSBAX INDICATED A REVERSED.	NO-60 BHED AT PO	AR CHANGEOVE	S STEE	
-	H DOESH START.					
VEHICLE EFFECT-COMPOSITE RE-3CHEDULED.	TE RE-SCHEDULED.					
CORRECTIVE ACTION- CON	CORRECTED AC GROUND POLER SUPPLY PHASTING.					
AUTOPILOT-SQUARE-A/S	6953420 3480	UTF-FR1 55-41002-835	3/09 911119	YEB 60/C	,	******
ILURE MODE-FAILURE D ANT AMD INDICATED MO	FAILURE MODE-FAILURE DURING CPERATION, DURING YAW AXIS VIBRATION (R/S) AND PROOF CYCLE A; SHRD LOGIC CIRCUIT INTERN ITTANT AND INDICATED NO-GO. GYROB MERE CONFIRMED TO BE AT SYNC SPEED, REFER TO FAILURE LOG MANBER 558-5-DOE.	BRATION (8/3) AND PRE BYNC SPEED, REFER TO	OF CYCLE A, SHRD FAILURE LOG MUMB	LOGIC CIRCUI ER 558-5-002.	T INTERM	
CORRECTIVE ACTION-NOT	NOT A PLIGHT PROBLEM. CAUSE UNKNOWN, TYPE OF PROBLEM HAS OCCURRED MANY TIMES BEFORE ON CENTAUR BO	PE OF PROBLEM HAS OCC	URRED MANY TINES	BEFORE ON CE	HTAUR BO	
AUTOFILOT-SQUARE-A/B	8LV-80-04-4945F INDUCTOR CHOKE	FAR 86-86900-010	#41112 FACTORY	Y YES DATA FILTER NO DF206-7.5	1LTER 7.5	
FAILURE MODE-BIRUCTURA PERCENT, CAUSED BY TOPO	FAILURE HODE-BIRUCTURAL, THREE UNITS PROM STOCK HAD LOM INDICTANCE. VALUE EXPECTED WAS 7.5 HEMRIES PLUS OR MINUS PERCENT, CAUSED BY TOPOID CORES DEING BROKEN, CAUSE OF BREAKAGE NOT KNOMM.	NDI-CTANCE, VALUE EXPTAKAGE NOT RNOHM.	CTED WAS 7.5 HEN	HER PLUS OR	1 822	
RRECTIVE ACTION-RAR	CORRECTIVE ACTION-RAR SLY-99-04-3989 MAS MRITTEN TO INFORM VENDOR OF THESE FAILURES.	H VENDOR OF THESE FAI	LUREs.			.
AUTOFILOT-SQUARE-A/B	69F342D DISPLACEMENT 67ROS	UTA-PRT T-04250-601	\$4130\$ 60/C	YES KEARFOTT NO	*	
FAILURE HOOK-OUT OF APP NY GYROS HAD OUT-OF-TOLI UMBER SSE-6-DOA:	FAILUME HODE-OUT OF SPECIFICATION OR TOLERANCE-DUMING PROOF CYCLE & THE SHAD OUTPUTS FROM PITCH AND ROLL DISPLACEME. NY GYROS HAD OUT-OF-TOLERANCE NOISE LEVELS. THIS FAILUME OCCUMRED DUMING PRI ON 55-41002-835. REFER TO FAILUME LOG NUMBER 556-6-DOI.	OF CYCLE B THE SHAD C CCURRED DURING PRT OF	STREETS PROM PLTC.	THER TO FAILT	SPLACEME AE LOS N	
And the state of t	gey and reproduced the second				PAGE GESS	

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

VENDOR HAME	E 18 NO SPECIFIC 899840	\$ 50/C 000030	CUT-OF-TOLERANC	094940	۸۱۶.	3 GDC 89264D	SHED FILTER OUTPUT. CAUSE NOT KNOWN. AMALYSIS COULD NOT DU AMALYSIS RESUL'S AND CAUTIONED AGAINST ERRONEOUS REJECTION Y HAD BEEN REJECTED RATHER THAN AN INDIVIDUAL SUB ASSEMBLY.	YES KEARFOTT NO CTOESOGOS	EATER THERMOSTAT. N AND STAT THERE.	REQUESTED TO TAKE
E SITE PRI	BY DESIGN GROUP AS THERE ACTION REQUIRED.	60/C YES	EGREE WHICH IS	r YES	MENT CYRO SICK	FACTORY YES	OT KNOMM. AMALYSIS COL WED AGAINST ERROWEOUS MAN AN INDIVIDUAL SUB	FACTORY	EN-CIRCUITED HE RMOSTAT TO OPEN	KEARFOTT WAS
OURCE VEHICLE BER DATE DIF		641105	8 1.52 VOLT8/DI	CR CAUSE FOUND. PED/DFL 111F 641103	ABORT START.	204D 641030	SHED FILTER OUTPUT. CAUSE NOT K ANALYSIS RESUL'S AND CAUTIONED "HAD BEEN REZZCTED RATHER THAN	69-7203	D DUE TO AN OPE LY CAUSING THES	THIS AKALYSIS.
DIF DATA SOURCE PART NUMBER	S NOT CONSIDERED A DISCREPANCY GYRO PACKAGE LEVEL. NO FURTHER	UTP-PRT 55-41002-635	DISPLACEMENT BENSITIVITY WAS 1.32 VOLTS/DEGREE WHICH IS CUT-OF-TOLERANC WASER 556-6-001.	NOT BE CONFIRMED OR CAU	ENGINE MOVEMENT COINCIDENT WITH ABORT START. RESULTING FROM ERRATIC PITCH AND ROLL DISPLA	FAR E7-43185-3	TED SINEMAVE AT SHED FILTER OUTPUT. CAUSE NOT KNOMN. AMALYSIS NOTIFIED OF THE AMALYSIS RESULTS AND CAUTIONED AGAINST ERRONE CIRCUIT ABSEMBLY HAD BEEN REALCTED RATHER THAN AN INDIVIDUAL	FAR 081AT 7-04250-401	HEATER CIRCUIT WAS OPEN CIRCUITED DUE TO AN OPEN-CIRCUITED HEATER HAD APPARENTLY BACKED OFF BLIGHTLY CAUSING THERMOSTAT TO OPEN AND	F THE RESULTS OF
TEST/REPORT NUMBER FAILED CONFORMT NAME	AT THE	69F34E0 DISPLACEMENT GYRO PACKAGE	FERACE ROLL FAILURE LOG	DISPLACEMENT DISCREPANCY COULD NOT BE CONFIRMED SOF SOM I SODS/E1-6HO-01-111 COMPOSITE-F DISPLACEMENT GYRO		LV-99-04-4034F 94RD	DISTOR	SLV-99-D4-4936F DISPLACEMENT GYROSCOPE THERMOSTAT	COARSE COARSE	CORRECTIVE ACTION-RAR BLV-99-04-3990 ADVISED VENDOR OF THE RESULTS OF THIS AKALYSIS. REARFOIT WAS REQUESTED TO TAKE
8787EN 8UB-8187EN	CORRECTIVE ACTION-HOISE LEVELS ON SHRI	AUTOPILOT-SQUARE-A/B GTRO PACKAGE	FAILURE MODE-OUT OF TOLERANCE, AN	CORRECTIVE ACTION-ROLL AUTOPILOT-SQUARE-A/B GTRO PACKAGE	FAILURE HODE-ERRATIC OPERATION-UNUSUAL SYSTEM EFFECT-IMPROPER AMALOG SIGNALS. VEHICLE EFFECT-NOME.	CORRECTIVE ACTION-NONE. AUTOPILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-OUT OF SPECIFICATION. DISTOR PLICATE THIS FAILURE. CORRECTIVE ACTION-FACTORY PERSONNEL WERE . IT MOULD HAVE BEEN BETTER IF THE ENTIRE	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	FAILURE MODE-OPEN, ELECTRICAL. THE THERMOSTAT CENTER HOLD DOMN	CORRECTIVE ACTION-RAR 8

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME

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VENDOR HANE		6 00	NOT KNOWN. PAILUME IS ATRIBUTED AND 8-4. ST 25: 1864 REQUIRES NORE EXTEMS IR COMPONENT TOLERANCE BUILD UPS	٧/9	SHORT CIRCU	FREEZELANTISTURPHANTISTURPEN - PROTESTANTISTURPEN	MUP THE 4 W	TES REARFOTT	DISCREPACII S FOUD IN SCOPE, RESII CHIPS ON SM	PAGE DEFI
- ±		7E\$ 60C	IL UNE EQUIN OLERA	ů g	3	8 8	3 ÷	5 3	**************************************	
VEHICLE NITE DATE DIF TIME DIF		FACTORY	S. 1864 PA	FACTORY	CAPACI TON	ETA	24 74 44 54 54 54 54 54 54 54 54 54 54 54 54	FACTORY	KNOMM. EL , A ERIST AD OF THE LDERED, 3 H PHENOLI	,
VEHICLE		R230	A-3 AND A-3 AND AUGUST 2	#101 #	5 6 7	2690	ING. APTE TERENCE 1	641908	TUSE NOT IN BENEAU TO THE BRONEN LE	
DIF DATA SOURCE PART NUMBER		FAN 87-43186-5	SBRATION RESISTOR. CAUSE NOT KNOW SAINS OF TRANSISTORS G-3 AND G-4. EDURE EOF 330.487 OF AUGUST 25; II IS ALLOWS COMPENSATION FOR COMPONSILT PRIOR TO TCA-5.	FAR R7-48184-5	ON. PAILUME IS ATTRIE	FAR E7-41002-958	HAD A LOW ROLL SLAVI UTED TO A BLIGHT DIFF	FAR 7-04250-801	FROM STOP TO STOP. C. STRANDS OF A LEAD WELLING THAKADS ON THE LOAT, SWED COLL THPROMO SEARING & MAD SEVE	engarin ir diponi ir distribus kaltistas kaltistas kaltistas ("Mineralis kaltistas kaltis kaltis kaltis kaltis
TEST/REPORT NUMBER FAILED COMPONENT NAME	OLD DOWN SCREW REMAINS TIGHT.	LV-88-04-4833F SHRD	PAILURE MODE-OUT OF TOLERANCE, DISTORTED SIGNAL AT THE CALIBRATION RESISTOR, CAUSE NOT KNOWN, FAILURE IS ATRIBUTED TO BUILDUP OF COMPAGNIT TOLERANCES, PARTICULARLY THE HIGH GAINS OF TRANSISTORS 6-3 AND 6-4. CORRECTIVE ACTION-TEMPORARY CHANGE AUTHORIZATION 3 TO PROCEDURE EOF 330.487 OF AUGUST 25, 1864 REQUIRES MORE EXTEMS INE 1.311NG OF THIS UNIT BEFORE AND AFTER ENCAPSULATION. THIS ALLOWS COMPENSATION FOR COMPONENT TOLERANCE BUILD UPS BEFORE UNIT IS POTTED. THIS FAILED ASSENDLY PROBABLY WAS BUILT PRIOR TO TCA-3.	N.V-BB-G4-8828F BHRD M3DULE CAPACITOR	FAILURE MODE-SMORT, ELECTRICAL, SMRD GAME A MO-60 INDICATION. FAILURE IS ATTRIBUTED TO CAPACITOR C-3 SMORT CIRCUITI M. REASON FOR SMORT IS NOT ANOMY. CORRECTIVE ACTION-MOME.	LV-98-04-4807F	FAILUME MUDE-OUT OF TOLERANCE, AUTOMILOT GYMODECHE PACKAGE HAD A LOW MOLL BLAVING, AFTER TWO HOW MARMUF THE A VOLT Rill BLAVING CANE WITHIN SPECIFICATIONS, FAILURE 18 ATTRIBUTED TO A BLIGHT DIFFERENCE IN TEST SETS AND TO CALIBRATI NG A VOLT ROLL BLAVING ON THE LOW END OF TOLENANCE.	SLY-09-04-4PETV DisPLACEMENT SYROSCOPE	PAILINE MODE-OUT OF TOLERANCE, PESTRICTED SINGAL MOVEHENT PROM STOP TO STOP. CAUSE NOT KNOWN. ELEVEN DISCREPANCIES. FOUND DURING AMALYSIS ARE A BARE LEAD, FLUID LEAK, SEVERAL STRANDS OF A LEAD WERE BROKEN, A BAISLE WAS FOUND IN THE AS ON SAME ATOT SLOT, FLUID SECRED INTO THE FIVOT MOUNTINE THAEADS ON THE MOTOR LEAD OF THE GYROSCOPE, RESIN AS ON SAME OF TEMINAL OF THE GYROSCOPE, RESIN MAGNET, CAP SIDE OF HYSTERESTS RING AND ON THAIDE OF FLOAT, SWED COIL IMPROPERLY SOLDERED, STEEL CHIPS ON SHAD MAGNET, CAP SIDE OF HYSTERESTS RING AND A RAISED ARE SPOT AND BEARING E HAD SEVERAL BROWN PHENOLIL PARTICLES IN THE ASSEMBLY. PROBABLE CAUSE OF FAILURE WAS THE BRISTLE.	
STRICK NO. STRICK	ACTION TO ASSURE THAT HOLD	AUTOFILOT-SEUARE-A/B STRO PACKAGE	PAILURE MODE-OUT OF TOLI TO BUILDUP OF COMPONENT CORRECTIVE ACTION-TOPPOR INC 1.311NG OF THIS UNIT BEFORE UNIT IS POTTED. TO	AUTOPILOT - SAUATE - A/B GTRO PACKACE	FAILURE MODE-BYCRT, ELEC NG. REASON FOR BYCRT IB I	AUTOFILOT - SQUARE - A/B GYBO PACKAGE	FAILURE MODE-OUT OF TOLI REAL SLAVING CAME MITHER NG A VOLT ROLL SLAVING OF	CORRECTIVE ACTION-MOME, AUTOFILOT SHURE-A/B 6780 PACANGE	FAILURE MODE-OUT OF TOLE FOUND DURING ANALYSIS ARE SIMBLE RIOTS FLUNDE AS ON SHAD TERHINAL OF THE MACHET, CAP SIDE OF HYSTE ASSEMBLY, PROBABLE CAUSE	

SEMERAL DYNAMICS CONVAIR DIVISION

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••••	DIFFICULTIES REVIEW-AUTOFILOT STRIEM-AIRBORME	TOPILOT SYSTEM-AIRSON	*				
	TEST/REPORT NUMBER PAILED COMPOMENT NAME	DIF DATA BOUNCE	VEHICLE DATE DIF	\$17E 71ME 31F		PRI VENDOR NAME OTH VENDOR PART NO	
TO. AND	CORRECTIVE ACTION-REARFOIT ST.DIED STROSCOME ASSEMBLY METHOD AND TOOK CORRECTIVE ACTION WHERE EVER MECESSARY TO IMP NOVE SUBLITY CONTROL AND INSPECTION.	HOD AND TOOK COMMEC!!	VE ACTION	WIERE EVI	y E	ESSARY TO IMP	•
AUTOFILOT-SAUME-A/B	LV-99-04-4909F 3440	FAR 59-41018-3	*4100	1 ACTORY	3 2	y 3	*****
FAILURE MODE-FAIL DURIN E HHRD MINDING MAD BEEN	NG CPERATION. SPIN NGTOR ROTATION DETECTOR OUTPUT OF THE PITCH RATE GYROSCOPE MAS MISSING. TH Danaged probably by an externally applied voltage, source of this voltage was not found.	ETECTOR OUTPUT OF THE APPLIED VOLTAGE, BOUN	PITCH RATI	E GYROSC WOLTAKE	3. 83	18 M1831M6. TM 10T FOUND.	<u> </u>
- MD00	CORRECTIVE ACTION-MENO 336-30-193 OF OCTOBER 1, 1864 IN ANSWER TO RAR SLV-89-04-3863 STATED THAT A WAP AND ECP HAD BEEN PREPARED AS A SOLUTION TO THIS PROBLEM BUT MERE WITHORAM BEFORE SUBMITTAL BECAUSE RELECTIONS IN THIS MODE MAD BEEN REDUCED.	NSMEN TO RAN SLY-88-0 RAIM BEFORE SUBHITTAL	4-3663 87A BECAUSE R	E.ECTION	3 2	HIS HODE HAD	·····
AUTOPELOT-SEIMPE-A/B GYRO PACKASE	LV-88-04-4830F D13PLACEDENT 67R08COPE HEATER	FAR 7-04£50-603	3 001 19	FACTORY	ž č	YES KEARFOLT NO CTO2504600	*****
FAILURE MODE-FAIL DURIN 5. CORRECTIVE ACTION-MOME.	FAILURE HONE-FAIL DURING OPERATION. GYROGOOFE HEATER MALFUNCTION. FAILURE IS ATTRIBUTED TO A LOOKE CONNECTION TO PI 15. CORRECTIVE ACTION-HOME.	UNCTION, FAILURE IS A	03W618TT	67 4 00 4 00	§ 3	PECTION TO PI	
AUTOFILOT - SAUMRE-A/B GYRO PACRAGE	FTA4484F3-4:0-02-E89 GTRC-018FLACENEMT	COMPOSITE-4 PACT	28007 9	2.3	ដូទ		******
FAILURE MODE-OUT OF SPE BOCKAN BOTH IN THE PLUS BOCKEN PETETT-LIMBORER	FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE NOW LINEAR ROLL DISPLACEMENT 6780 TORBUING OCCURRED DURING THE ROLL PROCESA BOTH IN THE PLUS COURT AND THE HIMS COURT GUIDANCE COMMAND TEST DUE TO LOW TORBUING FOLTAGES.	RCLL DISPLACEMENT 67 E COMMAND TEST DUE TO	NO TORBUSH	1704 9KI	9 . 6 . 8 .	THE ROLL	and the second second second second
ÿ	WHICLE EFFECT-HOME, YON-LINEAR RESPONSE OF THE EMINES OCCURRED.	ccurrent.					
CORRECTIVE ACTION-UNKNOWN.	j			-			
AUTOFILOT-SAURE-A/B GTRO PACEAGE	A-98-04-48EIF 01sPLACEMENT 67ROSCOPE	FAR 7-04250-603	324079 0108	PACTORY	\$ Q	YES REARPOTT NO C70-E506-000	
	PAILING MODE-DRIFI. CHCESSIVE DRIFT, CAUSE MOT KNOMM, POSSIBLY CAUSED BY A VOID ENTRAPPED M.THIN THE PHASE-C FLEKLE D BAFFLE.	BIBLY CAUSED BY A WOL	O ENTRAPPE	W. THIR	Ĭ	MABE-C FLEKLE	
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GENERAL DYNAMICS CONVAIR BIVISION

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORME

3101EH 810-810EH	TEST/REPORT NUMBER FAILED COMPONENT MANG	DIF DATA BOUNCE PART NUMBER	VEHICLE BITE PRI VE DATE DIF THE DIF OTH VEN	VENDOR MANE	
CORRECTIVE ACTION-NOME.	en de versionen en en sant en sant en sant en	and the second s			******
AUTOFILOT-SQUARE-A/B	SLV-DD-DA-4889-F RATE STRO SMED	# A # 400-440-44-44	CADSEL FACTORY NO GDC		70000
FAILURE WODE-OUT OF TOLERAL CONTROL WOLTAGE WAS WERT LOW E REALESTED TO INVESTIGATE IN THE PITCH BATE SHOED LINE.	FAILURE WORE-OUT OF TOLERANCE. TWO RATE GYRO PRG REJECTED WHEN PITCH RATE GYRG SPIN MOTOR ROTATION DETECTOR (SMED) CUIPUT VOLTAGE WAS VERY LOW. TEST AMLYSIS FAILED TO COMPIRM THE REPORTED FAILURE IN THE GYRO PAG SITE PERSONNELL MER E NEGLESTED TO INVESTIGATE THE TEST SET AT WIR. THEY FOLMD AN INTERHITTENT OPEN CIRCUIT IN TEST TABLE PATCH PANELL I N THE PITCH BATE SHOULLINE.	MEN PITCH RATE GYRO I THE REPORTED PAILU N INTERHITTENT OPEN	SPIN NOTOR ROTATION DETECTE IN THE EVRO PLE SITE PER CIRCUIT IN TEST TABLE PAIN	CTOR (BMB) ERSONCL NER TON PANEL: 3	
CORRECTIVE ACTION-SITE	PERSONNEL REPAIRED THE INTERHITTENT CONNECTION IN THE TEST SET.	COMECTION IN THE TI	tat set.		
AUTOFILGI - SQUARC - 1 M.	8LV-78-04-4817F DISPLACENENT 6780	FAR 48-41002-637	69-7103 "ACTORY YES 6D/A 840W18 NO		*****
FALLURE MODE-OUT OF TOLE	FAILURE MODE-OUT OF TOLERANCE, PITCH DISMLACEMENT ANGRAGE SENSITIVITY WAS LOW. CAUSE NOT KNOWN, FAILURE IS ATTRIBUT ED 10 NORMAL CLAPONENT AGEING AND NANSCH SPECIFICATION INPOSED ON THE SYSTEM.	DISTRIBITY HAS LOW.	CAUSE NOT RICHAL FASILURE	1 8 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	
CORRECTIVE ACTION-NOWE.					
AUTOPILOT-SAUANE-A/T	EV-68-04-4903F 3480 CAFACITOR	FAR 27-43180-3	640815 FACTORY YES 6D/C	-	462307
FAILURE MODE-OUT OF YOU MELD ON THE FORITIVE TEN	FAILURE MODE-OUT OF YOLEBANCE, MODULE HAD A MALFZMANE RATHER THAN A FULLZMANE RECTIFIED SIGNAL, CAUSED BY A MISSED ELD ON THE MODITANC TERMINAL OF CAPACITOR C-4.	P THAN A FULL CHANG !	RECTIFIED SIGNAL, CAUSED &	BY A MIBSED WHIMATORB. T	
HECE HEN SIPPICAN HELD HE	HECE HEW STRPICAN MELD MACHINES HERE MORE OPERATIONAL.				
AUTOFILOT-SQUARE-A/B	54.V-60-04-4681-F 67BO PACRAGE	FAR 66-41002-237	640810 FACTORY YES		
FAILURE MODE-OUT OF TOLE ATIONS, THE PITCH FORDULE EGATINE SUIDANCE INPUT II B.DB.	PAILUME MODE-CUT OF TOLERANCE, AUTOPILOT GYBO PACKAGE MAD LOW PITCH TORBUEING SAINS. ACCORDING TO EXISTING SPECIFICAL AXIONS, THE PITCH CORDUEING GAINS WAS DUE TO LOW, OUT OF TOLERANCE, HOMEYER, THE SPECIFICATION IS IN ERROR SINCE A N EGATINE SUIDANCE INPUT IS ACTUALLY UNED INSTEAD OF A PORTIVE ONE. THE SIGNAL BPECIFICATION SHOULD BE B.42 INSTEAD OF S.DS.	CAF PETCH TOROUGING (ERANCE, HONEVER, THE ONE, THE BESMAL BP	PATHS, ACCORDING TO EXISTY ESPECIFICATION IS IN ERRO ICIFICATION SMONLD BE E-42	ING SPECIFIC OR SINCE A N E INSTEAD OF	
CORRECTIVE ACTION-ECH 34	ECH 382337 RFLEABED ON DATE 640616 REVISED THE ENISTING PARAMETERS DOCUMENT TO REPLECT THE CORREC	D THE EXISTING PARAL	METERS DOCUMENT TO REPLECT	T THE CORREC	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORMS

	103100	•••			27 1000		021			
VENDOR HAME VENDOR PART NO			6. TEST ANALTI SEPERATED PRO	INSPECTION OF DER JOINTS ARE		S VOLTAGE WES		LAUNCHER BOOM	de de la companya de	OF FAILURE IN CONTINUE AS T CONTINUE AS T
- 10 - 12		ž č	E GV 3	7 7 6 5 E	9 9	a a a a a a a a a a a a a a a a a a a	ž 3		ž č	CAUSE
114E DIF OTH		FACTORY	IN A/P GI	S TO INCR D THAT AL EFECTS FO	FACTORY	E BOX 18	12 -7860	05 22 72 72 42 72 43 44 45 45 45 45 45 45 45 45 45 45 45 45	FACTORY	DISPLACEMENT GYRO KARATIC DISCREPANCY, THE CAUSE OF HOMEYER, COULD NOT BE COM
VENICLE DATE DIF		****	RECORDED MAS A BR	TROMAUTIC OR ADVISE AND NO D	640906	ETHOD OF COMECTOR DMICA-TTP	1950	MASE WHEN SYNO	1950	DISPLACE DISCREPA HOME VER
DIF DATA SOURCE PART NUMBER	nados se consistente e establica de la consistente de la consistente de la consistente de la consistente de la	FAN 68-41002-837	(TOR (SHRD) NO-60 UAS I CIRCUITED, THE CAUSE	WE ISSUED ADVISING BUALLITY CONTROL IN ASTROMUNICE TO INCREASE TO ACCOMPLISH MAMPLE PULL TESTS. THE VENDOR ADVISED THAT ALL SO MAGNIFICATION. ALL STOCK WAS RE-INSPECTED AND NO DEFECTS FOUND.	FAR 69-41 DOZ-837	STATE PACKAGE REPORTEDLY HAD NO OUTPUT FROM THE TEST ANALYSIS SHOKED THE APPROVED NETHON OF NO A SANDATCH-TYPE BOX AT THE PACKAGE COMECTORS.	COUNTDOM 27-41002-937	ICATED ERRATIC RESPONS D TORBUING. FION BECAUSE PROBLEM O	FAR E7-41002-837	EPORTEDLY FAILED DUE TO YAM DISPLACEMENT GYRO ERRATIC OUTPUT DUR E NEERS DID HOT CONTINK THE DISCREPANCY, THE CAUSE OF PAILURE IN ASSOCIATED CIRCUITRY, THISH HOMENER, COULD NOT BE CONTINUED AS T
TEST/REPORT HUMBER FAILED COMPORENT NAME	man gibes weading as may say visus spirits of the state of the spirits of the state	SLV-BO-O4-4888-F TAM DISPLACEMENT 67BO WIRE	FAILURE MODE-ELECTRICAL OPEN, A SPIN-MOTOR ROTATION-DETECTOR (BARD) NO-60 WAS RECORDED IN AZP 6180 PK6. TEST AMALTS IS INCICATED TAW DISPLACEMENT 6780 SPIN HOTOR PHASE A OPEN CIRCUITED. THE CAUSE WAS A BROKEN FLEXLEAD SEPERATED FRON THE ROTOR CLIP DUE TO A FAILED FOLDER JOINT.	CONFECTIVE ACTION-RER SLY-80-04-3988 WAS ISSUED ADVISING BUALITY CONTROL IN ASTRONAUTICS TO INCREASE INSPECTION OF THE CLIP-TO-FLEXLEAD SOLDER JOINT AND TO ACCOMPLISH SAMPLE PULL TESTS. THE YENDOR ADVISED THAT ALL SOLDER JOINTS AND 100 PERCENT INSPECTED AND NO DEFECTS FOUND.	3LV-90-04-4488-F 3MD		AA44-0030/PE-401-00-183 TAW DISPLACENENT 67RO	FAILUIE MODE-OUT OF TOLERANCE, TAM DIBPLACEMENT GTRO INDICATED ERRATIC RESPONSE WHEN 57RO WAS TORQUED. STREE FEFECT-IMPROMER AMALOG BIGMALS DUE TO EPRATIC GYRO TORGUING. WENIC E EFFECT-COUNTDOMM DELATED. UNDETERMINED TIME BURATION BECAUSE PROBLEM OCCURRED DURING MOLD FOR LAUNCHER BODGES UNIT FAILURE.	LV-48-04-4885-F DISPLACEMENT SYRO	FAILURIN MODE-FRRATIC CHERATION, THE A/P 6YRO PRG. REPORTEDLY PAILED DUE TO YNW DISPLACEMENT GYRO ERRATIC OUTPUT DUR ING -LY TOWAUE MG TEST, EXTEMBINE TEST AMALTSIS FOR E MEEKS DID HOT COMPIN THE DISCREPANCY. THE CAUSE OF FAILURE IN DICATINS COULT MANC SEEM IN THE MISSILE MARKESS OR ASSOCIATED CIRCUITRY. THIS, MOMEMEN: COULD NOT BE CONFIRMED AS T HE MISSILE MAD FLOWN.
BYBTEN BUG-STRTEN	T BPE 'IFICATION'	AUTOPILOT-SQUARE-A/B STRO PACKAGE	FAILURE MODE-ELECTRICAL 18 INCICATED TAW DISMLACE THE ROTOR CLIF DUE TO A	CORRECTIVE ACTION-RAR BA THE CLIP-TO-FLEXLEAD SOLE 100 PERCENT INSPECTED UP	AUTOFIL ST-SQUARE-A/B	FAILUIE MODE-FAILED IN C TON DETECTOR (SMRD) TEST NOT DOWE, THE APPRIMED ME CORRECTIVE ACTION-WIR PE	AUTOPIL 37-34UARE-A/S AAAA-0030/PE-403-67R0 PA : A/E TAN DISPLACENENT	FAILUIE MODE-OUT OF TOLE STATE : EFFECT-LAPROPER A VEHIC E EFFECT-COUNTDOM TER UNIT FAILURE.	AUTOPIU.T-BRUNE A/B	FATLUNG MODE-ERRATIC CAP ING -2V TOWAUE NG TEST, I DICATIONS COULT MANG BEEN ME MIBBILE MAD FLOMM.

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375TEN 3.08-373TEN	TEATHEPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE SITE	VEHICLE BITE PRI VENDOR PART NO	0
CORECTIVE ACTION-MOME.					•
AUTU-ILOT SQUARE-A/B	A-99-04-4912F SARO BAND PASS FILTER/CAPACITOR	FAR 87-04948-5	3020 FACTORY 840902	YES APPLIED COMPON NO ENTS ACT-3024	H 65263E
FILLME MODE-STRUCTURAL, BAND PASS FIL. IL AND THE LEAD IN THE INPUT CAPACITOR. CONRECTIVE ACTION-PER FAR-LY-99-04-487 OND WILL BE DETECTED BY A DISSIPATION FOR 6 STABLISHED COMPLETE RECEIVING INSPE	TER NU	D AN EXCESSIVE LOSS. THIS IS ATTRIBUTED TO A BROKEN BOND BETWEEN VENOR DID A PULL TEST ON CAPACITORS LEADS. ANY CAPACITOR WITH A TEST. EFFECTIVE OCTOBER 1963. THIS FILTER WAS HADE IN JUNE 1963) RECORDS FOR CAPACITORS WITH PERIODIC REVIEWS FOR DISCREPANT LOTS.	BUTED TO A BROKEN RA LEADS. ANY CAP. B FILTER WAS 140DE IC REVIEWS FOR DI:	BOND BETWEEN THE P CITOR WITH A POOR IN JUNE 1963). VEN	9 60
AUTOFILOT-SQUARE-A/B	LV-98-04-4667-F YAW DISPLACEMENT GYBO	FAR 27-41002-937	64DB31 FACTORY	YES NO	•8366
FAILURE MODE-FAILED DURIL . MAK. ALLOMABLE OF 0.0655 LEX LEADS. EXPERIENCE MAS RMUP AND COCADOMM CYCLES.	FAILURE MODE-FAILED DURING OPERATION. THE A/P GYRO PKG. EXHIBITED A HIGH DRIFT INDICATION IN YAM CHARMEL. D.0951 VS. . Max. ALLOMBLE OF 0.0658. DISASSEMBLY OF TAM GYRO TO FLEX LEAD ASSY REVEALED DISTORTION OF ONE OF THE SPIN-MOTOR F LEY LEADS. EXPERIENCE HAS SHOWN FLEX LEAD DISTORTION IS CAUSED BY DAMPING FLUID FLOW IN THE FLEX HEAD ASSY DURING WA RMUP AND COCADOMM CYCLES.	41817ED A HIGH DRIFT LEAD ASSY REVEALED LED BY DAMPING FLUID	INDICATION IN TAI DISTORTION OF ONE FLOW IN THE FLEX	d CHAMMEL, 0.0951 V OF THE SPIN-MOTOR HEAD ASSY DURING W	2.4
CORRECTIVE ACTION-BAFFIES	FFI ES NERE INSTALLED ARCIAD EACH PLEK LEAD. THIS DOES HOT SURE THE PROBLEM, BUT GREATLY LESSENS LURES.	EAD. THIS DOES HOT	CURE THE PROBLEM.	BUT GREATLY LESSEN	
AUTOP LOT-SQUARE-A/B GYBO PACKACE	3LV-89-04-4893-F 3ARD TRAMSISTON	FAR RY-68886-U	64GB19 FACTORY	7.63 64	993787
FAILURE MODE-OUT OF TOLE TEST AMALYSIS DIO HOT CON BOD XER-LINE COMDITTEN WA -18-8-18-00-3184E FOR-THE PA	FAILURE MODE-OUT OF TOLERANCE, THIS SPIN-MOTOR ROTATION- DETECTOR (SMRD) SUBASSY E GAVE A NO-GO DURING EDP 330-467 EST ANALYSIS DIO HOT CONTIRM FAILURE WITH MAX TOLERANTE INPUT OF 5.5Y ALTHOUGH THE UNIT DID FAIL AT 3.4V IMPUT. THE BOD DER-LINE CONDITION WAS CAUSED BY LOM GAIN OF 0-3 ENTSS! TRANSISTOR ALTHOUGH WITHIN TOLERANCE, TOLERANCE BUILDUR 1-1-18-FORTHE FOR THE MARGINAL GONDITION.	CTECTOR (SHIRD) SUBAS BUT OF 5.3V ALTHOUGH TRANSTSTOR ALTHOUGH	ST E GAVE A NO-GO THE UNIT DID FAIL WITHIN TOLERANCE	DURING EDP 330.467 AT S.AV INPUT. TH TOLERANCE BUILDUP	
CURIECTIVE ACTION-AVO TEL GOHH PROBE AND AN OBCILLI NA BY TCA S TO EOP 350-46 NA THE COAT OF BELECTINA	CURRECTIVE ACTION-AND TEMPORAILY CHANGED INPUT VOLTAGE TO SLES PLUS OR HINUS GLES VP-F AND IS ABJUSTED WITH A 10 ME GONN PROSE AND AND OFFICIALISCOPE EXTERNAL TO THE YEST SET, MIN. CALIBRATION RESISTANCE WAS CHANGED FROM 50 TO 43 KILCH AS BY TCA S TO GOP SLO.467 OF 25 AUG. 1964 INCSE CHANGED SHOULD GREATLY REDUCE PAILURES OF THIS TYPE WITHOUT INCURRIMM THE COST OF SELECTIME TRANSISTORS WITH SPECIAL DC BETA CHARACTERISTICS.	1.ES PLUS OR MINUS O 1. CALIBRATION RESIS DALD GREATLY REDUCE MARACTERISTICS.	.25 VP-P AND 15 AI TAKE WAS CHANGED PAILURES OF THIS	FROM SO TO 45 KILO TYPE WITHOUT INCURE	w z ~
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GENERAL BYNAMICS CONVAIR BIVISION

DIFFICULTIES SEVIEW-AUTOFILOT SYSTEM-AIRBORNE

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87.87EN 81.6 - 37.87EN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	317E 7114E 01F	# O	VEHICLE BITE PRI VENDOR PART NO	
AUNCHILOY-MAUARE-A/B GYRO PACKAGE	LV-80-04-4861-F	FAR 87-72585-605	440419	FACTORY	. Q		*5554
Fallume Mode-out of Tole Firm the Reported Discret 6.	TOLERANCE. IMPROPER MALLING OF YAN DISPLACEMENT GYRO OBSERVED. KNTENSIVE AMALYSIS FAILED TO COM Neremancy, it is likely that the Failure may have been caused by some defect outside the Gyro Pk	LACEMENT GYRO GBSER! MAY HAVE BEEN CAUS!	ED. KXIEN D BY 5046	BIVE ANAL DEFECT O	4 8 1 4 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	FAILED TO COM	
CORRECTIVE ACTION-MONE. A JIONILOT-SAUGHE-A/B 6190 PACKAGE	A-99-04-4903F SARD CAPACITOR	FAR 27-43186-3	130£	FACTORY	YES 40/0	9/6	***
FAILURE MODE-OUT OF TOLE ETWEEK A RIBBON AND THE N	TOLERANCE, SHRD SUBASSEMBLY R GAME A NO-GO DURING FUNCTIONAL TEST, CAUSED BY A DEFECTIVE LELD B THE NEGATIVE TERHINAL OF CAPACITOR 64.	-60 DURING FUNCTION	L 1687. C	Ve CESTON	V	ECTIVE LELD B	
CORRECTIVE ACTION-POMER	CORRECTIVE ACTION-POWER MICROSCOPES AND ILLUMINATORS, AND NEW SIPPICAN WELD MACHINES ARE NOW BEING UTILIZED.	EM SIPPICAN WELD MAC	HINES ARE 640814	NOW BEIN	C UT	G UTILIZED.	993016
GYRO PACKAGE	9-5 TRANSISTOR-SHRO MODULE	0-0010V-VA			Q.		
FFILURE MODE-FAILED OURI WOLTASE MAS INCREASED ABO T TOLERANCES, PREVENTING	FILLME MODE-FAILED DURING OPERATION. THESE SPIN-MOTOR ROTATION DETECTOR SHED MODULES DID NOT FUNCTION UNTIL IMPUT WOLTAGE MAS INCREASED ABONE S PLUS OR HINNS D.S VOLTS. TEST AMLITSIS ATRIBUTED THE FAILURE TO A BUILDUP OF COMPONEN T TOLERANCES, PREVENTING THE B-S TRANSISTORS PROM STARTING THE CIRCUITS TRIGGERING ACTION.	TION DETECTOR SMRD PARLISIS ATTRIBUTED NE CIRCUITS TRIGGERI	COULES DE THE FAILU	RE TO A B	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	I UNTIL INPUT IP OF COMPONEN	
CGRECTIVE ACTION-INPUT WO. NEGOHH PRODE AND AN ONCILLOS KILOHMS, THESE CHANGES BHOUL L. D.C. BETA CHARACTERIBITES.	CGRECTIVE ACTION-INDUT WILTAGE WAS TEMPORARILY CHANGED TO 5.25 PLUS OR HIMUS D.25 V P-P AND 15 ADJUSTED WITH A 10 NEGOHH PROJE AND AN CRCILLOSCOPE EXTERNAL TO THE TEST SET. WINIMUM CALIBRATION RESISTANCE WAS CHANGED FROM 30 TO 45 KILOHMS. THESE CHANGES BHOLD GREATLY REDUCE FAILURED OF THIS TYPE AND THE COST OF SELECTING TRANSISTORS WITH SPECIA L.D.C. DETA CHARACTERISTICS.	S.25 PLUS OR HINUS OF INIMUM CALIBRATION B TYPE AND THE COST	.25 V P-P ESISTANCE OF SELECT	AND 18 A MAS CHAN ING TRANS	suld f gig p test	ED WITH A 10 ROH 30 TO 45 IS WITH SPECIA	
AUTOFILOT-BUUARE-A/B GFRU PACKAGE	8.V-99-04-4678-F 8-3 TRAMS[STOR: MMD	FAR 27-43188-3	21 0011	FACTORY	E Q		
FAILUME MODE-FAILED DUM! UE TO THE LOM GAIN OF B-	FAILUNE MODE-FAILED DUNIMG OPERATION, THE SPIN MOTOR ROTATION DETECTOR SAND FAILED DUNIMG EOP 330.487 PARAG 4.1.1. Due to the low gain of G-2 en736. The unit gave a no-so when tested with a 3.5% P-P big CP3 Reguired inPut.	MOTOR ROTATION DEFECTOR SHED PAILED DURING EOP 330-467 PARA A NO-GO MHEN TESTED MITH A 3.5Y P-P BIG CPS REGULRED IMPUT.	LED DURIN	e EOP 330 PS REGULR	* A	PARAS 4.1.1.	
CORRECTIVE ACTION-INPLY A 1D MECHNE PROBE AND A TO 48 ALLCHHB. THEBE CHA	CORPECTIVE ACTION-INFLY VOLTAGE MAS TEMPORARILY CHANGED BY AND TO SLES PLUS OR MINUS DLES V.P-P AND IS ADJUSTED WITH A 1D DECCHA PROBE AND AN OMCILLISCOPE EXTERNAL TO THE TEST SET, FINIMUM CALIBRATION RESISTANCE WAS CHANGED PROM SO TO AS ALLOMAS. THESE CHANGES SHOWING GREATLY REDUCE FAILURES OF THIS TYPE AND THE COST OF BELECTING FRAMSISTORS WITH	NO TO S.ES PLUS ON SET, FINIHUM CALES OF THES TYPE AND TH	MINUS B.E. ATTON RES E COST OF	S V.P-P A ISTANCE N BELECTIN	# 0 <u>2</u> 9 2 4	ADJUSTED WIT AMMED FROM SO MRISTORS WITH	
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DIFFICULTIES REVIEW-AUTOFILUT SYSTEM-AIRBORNE

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VEHICLE BITE PRI VENDOR NANE		LAL CONNECT OR FIRST DISCLOSES S. USING PLICE WHEN THIS UNI	T WILL BE REPAIRS , WHICH IS NOT H TES 4010020	FAULT PRIOR	ECTOR (3MED) PERRING FALLI REARING FALLI RECTION AT NO MINOR NON-REP MM.	PAGE ORTY
BITE PRI		FACTORY YES HO KEN IN THE U RE HRS. AMAL) REAK TEST KNOAN HOM ON	GE TEST M MECTOR, M SIGMS.	DTON MINE	FACTORY YES NO DESTRUCTION TO THE LUGAR RESOLDER COMMITTED TO THE LUGAR RESOLDER COMMITTED TO THE LUGAR TH	
VEHICLE B		SADSIE FAC OUS NITROGEN 9 PSI IN 24 6 PURCE AND IT IS CHINCE	LEAK AND PURGE HE PTDYC COMME R ALL NEW DESI 7101 PALC	D A SYRO	MOBID FAC MENOTOR-ROT SHED FALURE TO A POOR B TO A POOR B THE HOTCA	
	1	640 D 643EOUS LE 18 9 P DURING P	21.13 LEAK TOR, THE P. TH, FOR ALL	INDICATE.	69-45 64-65 C. A SPIT- C. VED SHE OL F. OIL ED DUE TO LAPSED-TI	
DIF DATA SOURCE		41002-931 PRESSURTZE AX ALLOWAB E REPAIRED AND PURGE	URING THE MS- E ULUI CONNEC VERSION: PIO CONPOSITE-FRD	ST OUTPUT,	69-41002-637/69-45 045-1 D NHEN IT GAVE A S D TO AN UNRESOLVED D DE EXTION OF THE NDICATOR FAILED DU DETERHINED, ELAPSE OFILOT POSSIBLE DE	
		R-CANIBLE 27- D LEAKAGE OF SO MINUTES: W COMMAND AND AND AND AND AND AND AND AND AND	SCOVERED DURI EN MT IN THE U LLT SEALED VE WO-03-710 CO	BPIN MOTOR TE	ARING 69-41. KAGE FAILED ING. AILURE WAS DEP. SED TIME INDICA. ALD HOT BE DETER	
TEST/REPORT NUMBER	TER: STICS.	UTCPILOT-SQUARE-A/B LV-98-04-4888-F FAR PACKAGE THE PACKAGE R PTOTE ELECTRICAL COMMECTOR-CANISTE 27-41002-931 R FAILURE MODE-EXTERNAL LEAK. A/P SYNO PRG. EDHIBITED LEAKAGE OF PRESSURIZED GASEOUS MITROGEM IN THE ULUI CONNECTOR A FAILURE DECAYED FROM 1E PSIG TO 8 PSI IN 24 HRS. AMALYSIS DISCLOSED THAT LEAKAGE OF THESE COMMECTORS (PTOTE) IS FAIRLY COMMON, AND ARE REPAIRED DURING PURGE AND LEAK TESTS, USING PLUGBO MO RUBBER CEMENT. SINCE THIS COMMECTED DURING PURGE TESTS, IT IS UMENCAM HOW OR WHEN THIS UNIT FAILED.	COMECTOR LEAKAGE PROBLEM DISCOVERED DURING THE M3-21.15 LEAK AND PURCE TEST WILL BE REPAIRED BECAUSE OF THE LEAKAGE PROBLEM WITH THE UTJI COMMECTOR, THE PTOTC COMMECTOR, MAICH IS NOT HER BE REPLACED WITH A MERHITICALLY SEALED VERSION, PIGTM, FOR ALL NEW DESIGNS. GOC/22M44-DE4-DAIDIS-L4-TMO-03-710 COMPOSITE-FRD/DPL 7101 PALC TES 4010020	FAILURE HODE-FAILURE DURING OPERATION. SASAAY THE SPIN MOTOR TEST OUTPUT, INJICATED A 67RO SPIN MOTOR FAULT PRIOR T SYSTEM EFFECT-ERRATIC OPERATION. VEHICLE EFFECT-MOME. CORRECTIVE ACTION-THE RATE AND DISPLACEMENT 67RO CANNISTERS MERE REPLACED. SPIN MOTOR OPERATION WAS SIMULATED FOR T E. DP	PARTICULE HODE-FAILED DURING OPERATION, THE GIND PACKAGE FAILED WHEN IT GAVE A SPIN-MOTOR-ROTATION-DETECTOR (3MED) NO	
\$7.87EW 81.8 - 81.8	CHARAC	STROPILOT-SQUARE-A/B STRO PACKAGE FAILUKE MODE-EXTERNAL LE 7 PIN 7 MESSAME DECATED THAT LEAKAGE OF THESE COM MD RUBBER CEMENT. SINCE TI FAILED.	CORRECTIVE ACTION-ANY CO MITH PLINGOND CENENT, BE MITTCALLY SEALED, WILL BE AUTOPILOT-SAUARE-A/B STRO PACKAGE	FAILURE HCOE-FAILURE DUR O COUNTDOAN START. SYSTEM EFFECT-ERRATIC OP VEHICLE EFFECT-NOME. CORRECTIVE ACTION-THE RA ME DAL.	AUTOPILOT-SQUARE-A/B GYRO PACKAGE FAILURE HODE-FAILED DURI -60 AND THE TILKER WAS IND -60 AND THE FOLL DISPLACEMEN L CONTAMINANT PARTICLES O R LEAD. CORRECTIVE ACTION-WOME. ITTUE FAILURE. BEARING PR	

DIPFICULTIES REVIEW-AUTOPILOT SYSTEM-AINBORNE

VEHICLE BITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	FACTORY YES 880669	IT GAINS MERE FOUND OUT OF TO MALY OFF DURING PIG. CALIBRA OFBOTH.	FACTORY YES 8944E3	CALIBRATE, AMALYSIS SHOWED A LEAD, THE FRACT CAUSE OF BRO	I OF RIBBONS AND COMPONENT LE ION OF THESE NELDED MODULES.	FACTORY YES 884204	ACEMENT GAIN MEASURED AFTER 3. AMALTSIS DID INDICATE REJE	FINUTES MARMUP, THIS WILL A ALLOWED BECAUSE OF THE THERM	FACTORY YES SORA	E.S DB AT PEAK RESPONSE, EXA- REN OME CAPACITOR LEAD AND T
. —	640605	DISPLACEMEN BEING SLIGH F OR BY A CI	64 07 29	FALLED TO THE TO	COMPITION OR INSPECTIO	7343P8	E YAN DISPL	S AND FORTY YOLERANCE	AC1 640717	UATION OF 1
DIF DAT, BOURCE PART LUNGER	FAR ET-41008-837	FAILED WHEN AVERAGE (THER BY THE TEST SET LUE BLIGHTLY BY AGIN	FAN 87-43186-5	ETECTOR) SHED MAJULE	DDULE, THE MISALIGHES E TO BE CONSIDERED FO	FAR 55-41002-635	I WAS REJECTED DUE TO EXCESSIM OF A/P 6/ROSCOPE PR6. COULD DI OUT IN THE PROCEDURE.	TO REBUIRE THO MOUR! ND MINUS TWO PERCENT	FAN 87-04848-8	MHEN IT HAD AM ATTEM ABLE CAUSE WAS A POCK
TEST/REPORT NUMBER DIF DATE FAILED COMPONENT MAME PART	LV-88-04-4831-F	TCLERANCE, THE GYRO PKG, REPORTEDLY FAILED WHEN AVERAGE DISPLACEMENT GAINS WERE FOUND OUT OF TO ILLARE WAS CONTINUED AND WAS CAUSED EITHER BY THE TEST SET SEING SLIGHTLY OFF DURING PKG. CALIBRA BY CALIBRATION RESISTORS CHANGING VALUE SLIGHTLY BY AGING OR BY A COMBINATION OF BOTH.	LV-99-C4-4858-F SARD TRANSLATOR 8-4	FAILURE MODE-ELECTRICAL OPEN, THE (SPIN-MOTOR ROTATION DETECTOR) SHED MOJULE FAILED TO CALIBRATE, AMALYSIS SHOWED A N OPEN CIRCUIT SETWEEN THE COLLECTOR LEAD OF TRANSISTOR 8-4 AND THE RIDBON WING TO THE LEAD, THE FYACT CAUSE OF BRO KEN WELD COULD NOT BE DETERMINED.	CORRECTIVE ACYTH-10/C PERSONNEL WERE SHOWN THE PAILED MODULE, THE HISALIGHED CONDITION OF RIBBONS AND COMPONENT LE ADS THAT WERE VISIBLE, BETTER MAGNIFICATION AIDS AIDS WERE TO BE CONSIDERED FOR INSPECTION OF THESE WELDED MODULES.	LV-99-04-4844-F	TOLERANCE-A/P GYROSCOPE PKG WAS REJECTED DUE TO EXCESSIVE YAN DISPLACEMENT GAIN MEASURED AFTER Himute warn up. No pailure of A/P Gyroscope Pkg. Could be confirmed. Amalysis did indicate reje Deguate warn up IIME Called out in The Procedure.	CORRECTIVE ACTION-TEBT PROCEDURE ET-ED854 TO BE MODIFIED TO REQUIRE TWO MOURS AND FORTY WINUTES WARMUP. THIS WILL A SUME DISPLACEMENT SAIMS WILL NOT DRIFT BEYOND THE PLUS AND MINUS TWO PERCENT TOLERANCE ALLOWED BECAUSE OF THE THERM L CHARACTERISTICS OF THE PACANGE.	LV-89-04-4878-F FILTER-ELECTRICAL	TOLEBANCE, THIS FILTER WAS REJECTED WHEN IT HAD AN ATTENUATION OF 18:5 DB AT PEAK RESPONSE. EXA COULD NOT BE POUND. HOMIVER, THE PROBABLE CAUSE WAS A POOR BOND BETWEEN ONE CAPACITOR LEAD AND T
3787EM \$160-\$737EM	AUTOPILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLE LEBAKE HIGH, THE FAILURE TION AND BELL OFF OR BT C COMMETTIVE ACTION-MOME.	AUTOFILOT-SQUARE-A/S GYRO FACKÁSE	FAILURE HODE-ELECTRICAL OFFN. THE NOTEN CIRCUIT SETNEEN THE COLLECTREN MEIN MELD COMED NOT BE DETERMINED.	CORPECTIVE ACTOM-10/C PADS THAT MERE VISIBLE. BE	AUTOFILOT-SQUARE-A78 FIRO PACRAGE	FAILUPE	CORRECTIVE ACTION-TEST P SSURE DISPLACEMENT GAINS AL CHARACTERISTICS OF THE	AUTOFILOT-SQUARE-A/B GYRO PACHAGE	FAILURE HODE-OUT OF TOLE CT CALAE OF FAILURE COULD HE CAPACITOR.

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DIFFICULTIES REVIEW-AUTOMILOT SYSTEM-AIRBORNE

BITE PRI VENDOR NAME FITHE DIP OTH VENDOR PART NO	RECTIVE ACTION TAKEN. 691E93	PACTORY YES 880830	(SMED) SUBASSY & FAILED, PROCEDURE SSG.447 PARAG. CKT, BETWEEN THE RIBBON WELDED TO FIN 1 AND THE HERMCEDURE OF FIXING THE POSITION OF THE RIBBON	PERSONNEL LERE ADVISED OF THIS PROBLEM AND CAUTIONED TO ALLOM NO MOVEMENT OF T USED TO HOLD THE RIBBONS IN POSITION, IS CURING. 1-F FAR 640706 FACTORY YES NO NO	OF 330.467 PARAG. 4.1.1. TRA R LIMIT SPECIFIED BY WFGR. HO EMBLY. THE SPECIFIED VALVE 18	FACTORY YES	2	REPORTEDLY FAILED WHEN NO-OUT AN OPEN CIRCUITING TRANSISOR	MANUFACTURER BE ADVISED OF T	PACTORY YES HOMEYVELL NO JRIDIAE	THE REST AND A SAME AS A SAME OF THE REST OF THE SAME AS A SAME
BORNE T VEHICLE	IO OTHER COR	646713	BASSY & FAB NEEN THE RE UNE OF PEXE	CH AND CAUTH	ID) FAILED E WITHIN LONE 1 THE BUBASS	248041	2804	SUBASSEMBLY TION DUE TO OR WELDING.	TRANSISTOR	939079	N6 E.O.F. 3
DIFTICULTIES REVIEW-AUTOFILOT STREET-AIRBORNE. STREFORT NUMBER DIF DATA BOUNCE V	OH CAPACITOR LEADS. N	7A.7 27-451.00-5	ON DETECTOR (SHRD) SI. 10 BY A SHORT CKT, BE' MS MADE IN THE PROCES	DVISED OF THIS PROBLE R RIBBONS IN POSITION FAN IT TRA 27-43186-9	NOTATION DETECTOR (SHI) TO MAYE A GAIN JUST DERATE A GO SIGNAL SI		N-98197-14	TON DETECTOR (SHRD) : NIERHITENT IN OPERA INT ONER TO THE POST !	#8-04-3945 ASKED THA'	FAA 87-04574-3	IN OPEN POSITION DURI
OIFTICULTIES REVIEW	VENOOR MAS INITIATED PALL 1621S ON CAPACITOR LEADS. NO OTHER CORRECTIVE ACTION TAKEN.	LV-89-04-483R-F 848D	FAILURE MODE-SHORT (ELECTRICAL), THE SPIN-MOTOR ROTATION DETECTOR (SHED) \$UBASSY & FAILED. PROCEDURE 330-467 PARAG. 4.1.1. ANALYSIS CONFIRMED THE FAILURE AND IT WAS CAUSED BY A SHORT CKT, BETWEEN THE RIBBON WELDED TO PIN 1 AND THE RIBBON WELDED TO THE BASE OF TRANSISTOR 9-1. AN ERROR WAS MADE IN THE PROCEDURE OF FIXING THE POBITION OF THE RIBBON BEFORE POTTING THE SUBASSY.	PECTION AND MFG. PERSONNEL LERE ADVISED OF THIS PROBLEM AND CAUTION. THE EPOXY CEMENT USED TO HOLD THE RIBBONS IN POSITION, IS CURING-LY-99-04-4863-F EV-99-04-4863-F SHED SCHHITT TRIGGER CIRCUITRY TRA 27-43386-9 MSISTOR	FAILURE MODE-FAILED DURING OPERATION, THE SPIN MOTOR ROTATION DETECTOR (SHRD) FAILED EOP 330.467 PARAG, 4-1,1,1, TRA MSISTOR 6-3, EHTSE IN SCHMITT TRIGGER CIRCUIT MAS FOUND TO HAVE A GAIN JUST WITHIN LONER LIMIT SPECIFIED BY WFGR. HO WEYER A WOLTACE OF 7.07 PEAK TO PEAK WAS REBUIRED TO GENERATE A GO BIGNAL IN THE SUBASSEMBLY. THE SPECIFIED VALVE IS 5.5 PLUS OR MIMUS D.3 V.P.P.	1	SLV-99-04-4839-F TRANSISTOR, INPUT-ENGSS	DURING OFERATION- SPIN-MOTOR ROTATION DETECTOR (SHRD) SUBASSEMBLY REPORTEDLY FAILED WHEN NO-OUT I ANALYSIS REVEALED THE UNIT WAS INTERHITTENT IN OPERATION DUE TO AN OPEN CIRCUITING TRANSISOR DIMAS FRACTURED AT A KINK WHENE BENT OVER TO THE POST FOR MELDING.	CORRECTIVE ACTION-RELIABILITY ACTION REPORT (RAR) BLV-89-04-3945 ASKED THAT TRANSISTOR MANUFACTURER BE ADVISED OF HIS AMALYSIS AND APPROPRIATE ACTION BE INITIATED. NO OTHER ACTION IS CONTEMPLATED AS THIS IS PIRST FAILURE OF THIS AMSISTOR IN THIS MOSE.	A-99-D4-4626-F RATE GTROSCOPE/HEATER	FAILURE HOGE-OPEN ELECTRICAL, MEATER THERMOSTAT STUCK IN OPEN POSITION DURING E.O.M. 330.605; PARA, 4.8, THE 81 MET
# 1 4 TEM	CORRECTIVE ACTION-THE	. 1	FAILURE MODE-SHORT (ELECTRICAL), THE SP 4.1.1. ANALYSIS CONFIRMED THE FAILURE A RIBBON MELDED TO THE BASE OF TRANSISTON 8 MITH EPOXY BEFORE POTTING THE SUBASSY.	CORRECTIVE ACTION-INSPECTION AND MFG. (3MRD) SUBASSYS, WHILE THE EPOXY CEMENT AUTOFILOT-SQUARE-A/B SMRD SCHOLITT NSISTOR	FAILURE MODE-FAILED DU MS131OR 6-3, EH736 IN 34 MEVER A VOLTAGE OF 7.07 5.5 PLUS OR MIMUS D.5	CORRECTIVE ACTION-NOME.	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-FAILED DU PUT WAS CASERVED. 7EST LEAD. THE EMITTER LEAD	CORRECTIVE ACTION-RELLI HIS ANALYSIS AND APPROPE RANSISTOR IN THIS MUJE.	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE HODE-OPEN ELEC

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PRI VENDOR NAME OTH VENDOR PART NO		YES 60/C	THE FAILURE VER, AN OPEN 34944-3.	YES MO	SECTION OF 61 1E SPLICE OPE 41NG EXACT CA	ICE RECONSIDE 1964, ANSWER	ž č	ITED CAUSING T WHILE TRYIN E.		
VEHICLE SITE PI DAYE DIF TIME DIF O		ETR YE	T WENT OUT. ARMED, HOME: BER WAS E7-	FACTORY YES	SIS AND DISS WINDING, TI WER DETERMIN	PROGRAM OFF. ON OCT. 12, IMPROVENEN	FACTORY YES	ATER FLUCTU BUT WAS LOS' COVERED WIRE		
VEHICLE DAYE DIF		2160 640623	IE SHRD LIGH LMS NOT LE ER PART NUM	940616	TION, AMALY THE SENSOR	MUTICS SLV AM OFFICE, IBLE DESIGN	440812	PENERICATION OF LAQUERED	Parameter a material parameter and the parameter	
DIF DATA SOURCE PART NUMBER	V.J.L.	FAR E7-4100E-955	MAIN GYRO CAN MAS REJECTED MHEN THE SHRD LIGHT MENT OUT. THE FAILURE MAS ACTUAL CAUSE OF THE FILTER PAILURE MAS NOT LEARNED, MOMEVER, AN OPEN CAPA THE FILTER MAS BY-DASA6-3.	FAR 27-72585-801	ATER WOULD NOT FUNC ATED TO A SPLICE IN LYSIS WAS UNSUCCESS	3. REQUESTED ASTRON PROBLEM. THE PROGR A/P DESTGN FOR POST	FAR 7-41817 5	L TESTING THE YAN GING MALFUNCTION INV	CRMINED.	
TEST/REPORT NUMBER DIF DATA SOURCE V		14 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -	NG OPERATION, THE SHED FILTER, THE R NERE FOUND WHEN	THE CAUSE OF THE FAILURE WAS NOT LEARN'D. LV-90-04-4028-F ROLL-DISPLACEMENT GYROVHEATER 27-72	FAILURE MODE-OPEN (CLECTRICAL). ROLL DISPLACEMENT GYRO MEATER WOULD NOT FUNCTION. AMALYSIS AND DISSECTION OF GYROSC OPE REVEALED THE GYRO HEATER CIRCUIT WAS OPEN AND WAS ISOLATED TO A SPLICE IN THE SENSOR WINDING. THE SPLICE OPENED ONLY WHEN HEATED. WHEN COOL, IT MADE CONTIMULTY. X-RAY AMALYSIS WAS UNSUCCESSFUL IN FURTHER DETERHINING EXACT CAUSE OF THE INTERMITTENT OPEN.	CGRECTIVE ACTION-RELIABILITY ACTION REPORT 3LV-99-04-3943, REQUESTED ASTROMUTICS SLV PROGRAM OFFICE RECONSIDL. PR OPOSED STUDY OF CORRECTIVE ACTION FOR HEATER SENSOR SPLICE PROBLEM. THE PROGRAM OFFICE, ON OCT. 12, 1964, ANSWERLD T HE ABOVE RECOMMENDATION BY STATING TH, I A STUDY OF ENTIRE A/P DESIGN FOR POSSIBLE DESIGN IMPROVEMENTS MAS BEING IMIT TATED. SUBJECT FAILURES MOULD BE INCLUDED IN THE STUDY.	SLV-99-04-4818-F DISPLACEMENT GTRO HEATER	FAILURE MODE-ERRATIC OPERATION. DURING ASSEMBLY FUNCTIONAL TESTING THE YAU GYRO FINE HEATER FLUCTUATED CAUSING THE GYRO HINE HEATER FLUCTUATED CAUSING THE GYRO HEATER RING TO BE PEJECTED. PAILURE WAS CONFIRMEND DURING MALPUNCTION INVESTIGATION BUT MAS LOST MHILE TRYING TO ISOLATE IT. BELIEVED TO HAVE BEEN AN INTERMITTENT INSULATION BREAKDOMN OF THE LAGUERED COVERED WIRE.	CAUSE OF FAILURE COULD NOT PE DETERMINED.	
BYBTEN BUB-BTBTEN	1	CORRECTIVE ACTION-MORE, AUTOPILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-FAILED DURI CAUSED BY AN INIERMZITENT CITCR AND AN CHEN INDUCTO	CORRECTIVE ACTION-NOME. AUTOPILOT-SQUARE-A/B GTRO PACKAGE	FAILURE MODE-OPEN (CLECT OPE REVEALED THE GYRO HEA OMLY MHEN HEATED. MHEN CO OF THE INTERMITTENT OPEN.	CORRECTIVE ACTION-RELIAB CHOSED STOOT OF CORRECTIV HE ABOVE RECOMMENDATION B TATED, SUBJECT FAILURES H	AUTOFILOT-SQUARE-A/B	FAILURE MODE-ERRATIC OFE EVRO HEATER RING TO BE RE ISOLATE IT. BELIEVED TO	CORRECTIVE ACTION-NOWE.	

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DIFFICULTES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

SYSTEM BUB-BYBYEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE DATE DIF	1146 019	OTH VENDOR PART NO	2	
AU" DELLOT-SQUARE-ACE STRO PACRASE	A-C8-04-4840-P	FAR 7-04250-803	2430	FACTORY	YES KEARFOTT NO C70-2506-000		• • • • • • • • • • • • • • • • • • • •
FAILURE MUE-STRUCTURA YSIS CONFIRMED THE FAIL	FAILURE MUSE-STRUCTURAL. GYRO REPORTEDLY FAILED IMEN GYROSCOPE PRG. HAD NO SPINNOTOR ROTATION-DETECTOR OUTPUT, ANAL Ysis confirmed the Failure and was attributed to the (shrd) flexlead coming off its movable terminal Post,	MCOPE PKG. HAD NO SPI	IMPOTOR ROL	14710H-DE	TECTOR OUTPUL.		
CORRECTIVE ACTION-NEWO	CORRECTIVE ACTION-NEWO 558-50-183 WAS 183UED TO OBTAIN THE VEHDOR PROPOSAL POR INCORPORATION OF ADDITIONAL (SHRD) EXLEAD CLIP MECHANICAL RESTRAINTS ON FIXED AND HOVABLE (SHRD) TERMINALS.	E VEHDOR PROPOSAL POR	I INCORPORU	1710H OF	ADDITIONAL (SHR)	6	
AUTOFILOT-SQUARE-A/B	A1-4HO-02-E43 SHKD	COHPOS 1 TE-FRD/DPL 27-44534-801	2430 640609	5	YES NO		994935
FAILURE MODE-FAILED DURING OPERATION. A V INDICATION LAS JUNERED OUT DURING THE	DURING OPERATION, A SHED FAULT INDICA ERED OUT DURING THE TEST.	SHED FAULT INDICATION WAS RECEIVED ON THE LAP PRIOR TO LOOP TEST. THE FAULT TEST.	THE CAP IN	TOR TO L	OOF 1EST. THE F.	7	
SYSTEM EFFECT-IMPROPER DISCRETE SIGMLS.	DISCRETE SIGNALS.				٠	-	
VEHICLE EFFECT-COUNTDOWN DELAYED.							
CORRECTIVE ACTION-67RO	NO PACKAGE REMACED. (TROUBLE SHOOTE	(TROUBLE SHOOTING INDICATED THE FAULT MAS IN THE SHED CIRCUIT.)	E NI 841	SHRU C	IRCUIT.)	1	
AUTOFILOT-SQUARE-A/B	A-99-04-4640F Displacement Gtro-54RD	FAR 7-04230-803	40609	Ĕ	YEB REARFOYT NO	:	
FAILURE MODE-OPEN (ELE MOST.	FAILURE MODE-OPEN GLECTI. THE GTRO WAS REJECTED FOR NO SHRD OUTPUT. THE SHRD FLEX LEAD WAS FOUND OFF THE TENHINAL OST.	JARD CUTPUT, THE BARD	FLEX LEAD	MAS FOUR	D OFF THE TERMS	.	
CORRECTIVE ACTION-NOME.		and the second s					
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	LV-98-U4-4819-F DISPLACEMENT SYRO MOTOR	FAR R7-78585-801	3330	FACTORY	YESEARFOTT NO	:	\$ 115 89
FAILURE MODE-OUT OF TOI ECTOR CIRCUIT, FAILURE I	TOLEAAMCE. DURING MISSILE CHECKOUT A NO-GO OUTPUT WAS RECEIVED FROM THE SPIN MOTOR ROTATION DET IE NAS DUE TO A FAILURE OF THE YAM GYROSCOPE MOTOR. THE NOTOR BEARING WAS DRY.	NO-GO OUTPUT WAS RECE CACOPE MOTOR, THE HOI	TIVED FROM	THE SPIN	MOTOR ROTATION	130	
CORRECTIVE ACTION-THIA	CORRECTIVE ACTION-THIS PROBLEM INCLUDED IN A STUDY OF THE ENTIRE AUTOPILOT SYSTEM FOR A RE-DESIGN.	ENTIRE AUTOPILOT SYS	TEN FOR A	RE-DE 316	ż		
		egeppacensen – naste skryditerritriris spessferruspycym michadachddig spiss			PACE ORBY	1020	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

PALLURE MODE-OUT OF TOLERANCE DURING PACTORY MASSESLY TEST THE BARD HAD NO CUTPUT. FAILURE MAS ATTRIBUTED TO COMPONENT TALEMANCE BUILLOW, PRECRETING A LOW-LAIN TRANSISTON, 4-3, FROM STATING THE CIRCUITS TRICKENING ACTION. TOCKNECTIVE ACTION-THIS PRODUCH IS TO BE ONE OF SEVERAL CONSIDERED FOR IMPROVING THE AUTOFILD STRICK. TOCKNECTIVE ACTION-THIS PRODUCH IS TO BE ONE OF SEVERAL CONSIDERED FOR IMPROVING THE AUTOFILD STRICK. TALLUCE CHOICE-FAILED DURING CHEATING, DURING FACTORY CHECKOUT THE TRANSISTING. TALLUCE CHOICE-FAILED DURING CHEATING, DURING FACTORY CHECKOUT THE TRANSISTING. TALLUCE CHOICE-FAILED DURING CHEATING, DURING FACTORY CHECKOUT THE TRANSISTING. TALLUCE CHOICE-FAILED DURING CHEATING, THIS THE THIN STRICK TOW THE TRANSISTING. TO STRICK THE ACTION-THINE WAS UNCOPFIRED. CAUSE COALD NOT PRESENTING. COUNTY, FAILURE WAS UNCOPTED THE THE OFFICE THE TRANSISTING CONTROL OF TALLUCE PROGUMENTS. TO PACKED THE THIN SHARP THE STRICK THE THIN STRICK TOW THE TRANSISTING CONTROL OF THE WORK THE THIN SHARP THE THE THIN SHARP THE THIN SHAR
GADSET FACTOWY YES MAGNETIC CONTR. NO GLS ANALYSIS. ANALYSIS. ANALYSIS. ANALYSIS. AND SUBSECUENT LOSS AND SUBSECUENT SUBSECUENT IN THE SUBSECUENT SUBSECUE
NSTRUCTIONS EFFECTIVE JUNE 25, 1964 GNOUS REJECTIONS AND SUBSEQUENT LOSS ZBBD FACTORT NO GO/C 6403ES NO CTOR OUTPUT. FAILURE MAE DUE TO A DE EST EQUIPMENT OFERATORS AEOUT DAMAGE EST EQUIPMENT OFERATORS AEOUT DAMAGE ANDSEE FACTORY YES MONEYMELL NO N INTERNITTENT OFEN CIRCUIT IN THE 8
CTOR OUTPUT, FAILURE ME BUE TO A DE KESSED OF THE SHRD WINDILAS. EST EQUIPMENT OPERATORS ACOUT DAMAGE MADSPE FACTORY YES HONEYMELL NO NO N INTERNITTENT OPEN CIRCUIT IN THE &
MADSER FACTORY TES HONEYMELL NO NO N INTERNITTENT OPEN CIRCUIT IN INZ &
T ELECTRICAL TERTS THE STRO MAD AN INTERNITTENT OPEN CIRCUIT IN THE SOMPTRHED DUPING FAILURE ANALYSIS. CAUSE COULD NOT SE DETERNIMED.

GENERAL DYNAHICE CONVAIR DIVISION

****	DIFFICULTIES REVIEW	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	37.5			
BUB-BYETEM BUB-BYETEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE BITE	9 0 1 H 10	BITE PRI VENDOR NAME	
AUTOPILOT-SQUARE-A/B	814-89-03-4808-F	FAR 27-04574-5	640518 FACTORY	1	YES HOMETMELL NO	*:
FAILURE MODE-OUT OF TOLE E 20 MILLIMONTS, FAILURE , THE OUTFUT IMPEDENCE O DURING THE INITIAL PHANE	FAILURE MODE-OUT OF TOLERANCE, BURING CHECROUT THE MEABURED MULL WAS RY HILLIVOLTS, SPECIFICATION MAXIMUM E 20 MILLIWOLTS, FAIL OF COUSE COULD NOT BE DETERMINE, MOMEVER, THE OUT OF TOLERANCE MULL WAS TEMPERATURE. THE OUTPUT IMPEDENCE OF THE WINDING MAD CHANGED FROM 1500 TO 1812 OMM, AND AM INTERMITTENT FULAATION WAS BURING THE INTITAL PHABES OF THE FAILURE AMALTRIS.	BLMED NULL WAS ET HILLIY HOMEVER, THE OUT OF TOL 1908 TO 1812 OHM, AND AN	VOLTS. SPECIFICAT ERANCE NULL Nº 3 8 INTERNITIENT PU	ION HAI TEMPERA LAATION	IINUM LINITO AN TURE SENSITIVE I MAS OSSERVED	
CORECTIVE ACTION-MOMEY AEN.	CORRECTIVE ACTION-HOMEYNELL HAS INFORMED OF THE FAILURE. SINCE CAUSE COLLD NOT BE DETERMINED NO OTHER ACTION HAS TA En.	I. BINCE CAUSE COULD NOT	T BE DETERMINED N	0 0745	ACTION MAS TA	
AUTOFILOT SQUARE-ACE	ACUSS-001-12/FC-CO-01-0017-018 6780, DISPLACEMENT	COMPOSTIT-FACTORY 87-72585-801	3520 FACTORY 640318	22		•
FAILURE MODE-ERRATIC OF	FAILURE MODE-ERRATIC OFFRATION, TELDETRY RECONDINGS OF THE DISPLACEMENT GYROS INDICATED GYRO TORGUING AND MALLING INRING REVERSE RUM OF THE AGE TEST PROGRAMMER. THIS DISCREFANCY WAS CAUSED BY A DEFECTIVE AGE RELAY INTAS).	" THE DISPLACEMENT GYROR REPANCY WAS CAUSED BY A	DEFECTIVE AGE R	TORQUIN ELAT IS	6 AND MALING	
STATEN EFFECT-INPROPER ANALOG SIGNALS.	AMALOG BIGNALS.					
VEHICLE EFFECT-COMPOSITI	WENICLE EFFECT-COMPOSITE RE-SCHEDULED. POST-COMPOSITE TESTING REQUIRED.	TRTING REQUIRED.				
CORRECTIVE ACTION-REPLACED AGE RELAY.	ICED AGE RELAY.					
AUTOFILOT-SQUARE-A/B	LV-98-04-4402-F RATE 6780	FAR 27-04574-3	1960 FACTORY 840300	i	YES HOMETHELL HO	252760
FAILUPE HODE-STRUCTURAL. ES. MAXIMINA ANGLE ALLONET THE DISTONTED QUADRILEN	FAILUPE HODE-STRUCTURAL. DURING COMPONENT TESTING THE PHASE ANGLE OF THE OUTPUT SIGNAL WAS OBSERVED TO BE 3.9 DEGRE 18. MAXIMIA ANGLE ALLONED IS 3.5 DEGREES. ORIGINAL PAILURE COULD NOT BE CONTIRMED. A HIGH MULL VOLTAGE RESULTED PROM THE DISTONTED SUMDRILEYERS. CAUSE OF THIS DISCREPANCY IS NECHANICAL SCHOCK.	MASE ANGLE OF THE OUTPU RE COLLD NOT BE CONTIRM B MECHANICAL SCHOCK.	I SIGNAL MAS OBSI ED. A HIGH MALL I	ERVED T	O BE 3.9 DEGRE RESULTED FROM	
CORRECTIVE ACTION-MOME. ACTION COULD NOT BE DEFEN	CORRECTIVE ACTION-WOME, ORIGINAL FAILLME COALD NOT BE CONFIRMED. BOURCE OF BHOCK THAT CAUSED DISTORTED BUADRILEVER CTION COULD NOT BE DEFERHINED.	OWTHNED, BOURCE OF BHO	CK THAT CAUSED DI	18 TOR TEL	D CUADRILEVER	
AUTOFILOT-SULARE-A/B	SLY-99-G4-483G-F Seed BugasEMBLY EXCINCUITS	FAR 27-43186-3	640505 FACTORY	2 0		•

PAILUME MODE-OUT OF SPECIFICATION, A MO SO WAS INDICATED DUMING SUBASSENSLY TESTS, ANALYSIS INDICATED THE SIGNAL AT THE COLLECTOR OF 8-SIENTSSI DID NOT CHANCE AS THE MODULE INFUT WAS VARIED. FAILUME WAS ATTRIBUTED TO THE LACK OF A WELD AT THE COLLECTOR OF 8-3.

GENERAL DYNAMICS CONVAIR DIVISION

11 JAN 1966

DIFFICULTIES REVIEW-AUTOFILDT SYSTEM-AIRBORNE

DIF DATA NOUNCE VEHICLE BITE PRE VENDOR MAME PART HUMBER DATE DEF THE DIF OTH VENDOR PART NO	C INSPECTION INSTITUTED THE PRACTICE OF INSPECTING MELDED HOOLE ASSEMBLIES ON A RIDSON BY RID	FAR 2690 FACTONY YES HASHITC CONTR 884238	AL SHORT, DURING SUB-ASSEMBLY VISUAL EXAMINATION THE PROPORTIONAL TEMPERATURE CONTROLLER MAS NAS COSERVED TO BE CRACKED AND BURNED. DIODES CR-3 AND CR-4 (SEIMSSO), AND DIODE CR-9 (SE INS D). THREE WINDINGS OF THE MAIN REACTOR MERE FOUND SHORT CIRCUITED AND ONE WINDING WAS FOUND OPE.		FAR 1440 FACTORY YES MONEYMELL 695591 27-04574-5 640-42E NO	STPUT FROM THE BIGHAL GENERATOR.	FAR 1930 FACTORY YES 692766 27-41330-611 640416 NO	UNIT REJECTED JAHEN THE PITCH HEAT SCHOOLMS INDICATOR PAILED TO MAINTAIN 11G V PLUS OR MAS CANCELED.		GOE-BES WIR YES REARFOIT NO	THE MOLL PROPORTIGIAL HEATER REMAINED AT MAXIMUM OUTPUT AFTER THE ROLL SYROSCOFE HAD CAUSE UMS DUE TO A SHORT CIRCUIT BETHERN WINDINGS IN THE OUTPUT REACTOR OF THE PROPOS A TAW DISPLACEMENT STRO SPIN MOTOR BEARING WAS ALSO FOUND DRY.	ADDITION GENERALLY WAS MOTIFIED OF THE DEPLETION	・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
BYBIEH TEBTARENCET MUMBER 01F	3	LV-99-04-4766-F AMPLIFIER-MANETIC	FAILURE MODE-ELECTRICAL SHORT, DURING SUB-ASSEMBLY VISUAL EXAMINATION THE PROPO REJECTED WHEN THE CASE NAS OBSERVED TO BE CRACKED AND SUBHED, DIODES CR-3 AND CH ATY NEME OFEN CIRCUITED, THREE WINDINGS OF THE NAIN REACTOR NEME FOUND SHORT CIR M CIRCUITED, THE CONTROLLER APPARENTLY NAD BEEN WIBJECTED TO A CURRENT OVERLOAD.	CORFECTIVE ACTION-NOME. CAUSE COULD NOT BE DETERMINED.	AUTOPILOT-SQUARE-A/B LV-99-04-4767C FAR GYBO PACAAGE RATE GYBO RP-04	FAILURE MODE-FAIL DURING OPERATION. REJECTED BECAUSE IT HAD NO CUTPUT FROM THE BIGHAL GENERATOR. CORRECTIVE ACTION-MOME. FAILURE MOT CONFIRMED.	LV-98-04-4746C	FAILURE MODE-OUT OF TOLERANCE, UNIT REJECTED JANDS THE PITCH HEAT NIMUR 15 YAC, FAILURE AMALTRIR WAS CANCELED.	CORECTIVE ACTION-LARNOW.	AUTOPILOT-SQUARE-A/B SLV-80-04-4782-F FAR 6780 PACKAGE 015PLACEMENT 6780 NAGMETIC AMPLIFT 66-41002-825 ER	FALLURE MOCE-CLECTRICAL BHORT, THE MOLL PROPORTICIAL HEATER RENAINED AT MAXIMUM OUTPUT AFTER THE ROLL STROSCOPE MAD REACHED CREATING TEMPERATURE, CAURE MAS DUE TO A BHORT CIRCUIT BEINEEN WINDINGS IN THE OUTPUT REACTOR OF THE PROPO RTICHAL TEMPERATURE CONTROLLER. A TAM DISPLACEMENT STRO SPIN MOTOR BEARING WAS ALSO FOUND DRY.	COMMECTIVE ACTIONS MADMETIC AMPLIFIES WINDOS WAS NOTIFIED OF THE FAILURE, REARFOIT WAS NOTIFIED OF THE DEPLETION	

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9961 1677 51	LIFFICIATIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBOR	¥		
STRIES SUB: SYSTEX	TESTREPORT NUMBER FAILED COMPONENT MANE	DIF DATA BOURCE PART MUMBER	VEHICLE SITE OF C	SITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	
OF THE BEARING LUBRICA	RICANY, BOTH OF THESE MERE PIRST TIME INSTANCES OF THIS TYPE	STANCES OF THIS TYPE	OF PAILURE ON THESE COMPONENTS.	COMPONENTS.	*****
AUTOFILOT-SQUARE-A/B	SPARSOS.E MATE SYNO PACHAGE BOSD	UTP-ETT 89-43045-1	940410 60/C Y	7E& HO	•
FAILUME MODE-OUT OF TOLEBANCE, DU Et samp Pickoff, REFER TO FRR 254.	FAILUNE HODE-OUT OF TOLERANCE, DURING R/S VISHATION IN ETT TEST, A LOW SHAD SIGNAL NAS RECEIVED DUE TO A DEPAGNETIZ E SHAD PICKOPP, REPER TO PRR 254.	TEST, A LOW BARG BE	GAAL HAS RECEIVED DU	E TO A DEMANETLE	
CORRECTIVE ACTION-IMAD	CORRECTIVE ACTION-INADVENTANT APPLICATION OF VOLTAME REBULTED IN PARTIAL DENAGMETIZATION OF SHOOD MACHET. NO ACTION EQUINED.	TED IN PARTIAL DEMAG	NETIZATION OF SHOED H	AGMET. NO ACTION	
AUTOPILOT-SQUARE-A/B	31. V-49-04-4734F AJEL IFIER-TRAIGISTOR	FAR 00-4100£-037	7101 FACTORY V	7ES 50/C	
FAILURE MODE-BHOFF, ELL RY CIRCUITED 0-1 TRANSI	FAILUME HODE-BHOFF, ELECTRICAL. UNIT MEJECTED FOR NO ROLL-RATE ENITER FOLLOMER OUTPUT. FAILUME ATTRIBUTED TO A SHO AT CIRCUITED 0-1 TRANSISTOR, CAUSED BY A MANUFACTURING DEPTECT.	MIT BHITTS POLLOS	R OUTPUT. PAILURE AT	TRIBUTED TO A BMO	
CORRECTIVE ACTION-VENDOR	WINDOR INFORMED OF PROBLEM. GD/C MAD ADVISED THE TRANSISTOR MAD ASSEMBLED IN 1960 AND THAT SUBSEMBLED HAS DESCRIBED. IN 1960 AND THAT SUBSEMBLED HAS PROBLED.	INCO THE TRANSTROM	MAS ASSEMBLED IN 194	O AND THAT SUBSES	
AUTOPILOT-SQUARE-A/B	27-3213A Rate Gyro	UTP-PET 27-04574-9	(40407 GD/C Y	YES MIMM. MOMETAEL NO L JARRIGIAS	*002**
FAILUME WODE-OUT OF TO LB-IM-PMASE EQUALS Z4.Z BY 6YRO AGING AND IS NO	FF TOLGRANCE. DURING THE POST RSG HOUR LIFE PROOF CYCLE C THE 67RO HAD THE FOLLOWING EXCESSIVE MAN. 24.2 MV AND TOTAL EGUALS SQ.E MY, CAUSE IS UNKNOWN, MANGINAL MALL CONDITIONS ANE HORMALLY CAUSED IS NOT INDICATIVE OF A STRO DEFICIENCY.	PE PROOF CYCLE C THE IS UNKNOWN, MARSIMAL	GYRO MAD THE POLLON MALL CONDITIONS AND	THE EXCESSIVE MA.	
CORRECTIVE ACTION-BRECIFICATION CHANGE EMENTS, WILL BE MADE, REF. FR-654-E-292.	SPECIFICATION CHANCE INCRESSING ALLOMBLE TOLERANCE RANGE FOR IN PHASE MALL AND TOTAL NULL REGUIR C. REF. FR-654-E-29E.	I TOLERANCE RANGE PO	R IN PHASE MALL AND	TOTAL MAL REBUIR	
AUTOFILOT-SAUARE-A/B GYRO PACKAGE	A-98-04-4738C 348D BANDPA18 FILTER	FAR 87-04848-8	GADADA FACTORY Y	YES ACI NO ACI-3084	
Pailung mode-out of set E minimum sekcification Tuego seffonk ing som sef	PAILURE MOSE-OUT OF SPECIFICATION, 12 SHRO FILTERS REPORTEDLY FAILED AT THE SDC PACTORY WHEN THEY FAILED TO MEET TH E HIMIMUM SPECIFICATION OF 508 DIFFERENCE BETWEEN PES AND 818 CPS. IT WAS DISCOVENED THAT THESE FILTERS WERE MANNFAC TURED SEFORE THE 508 SPECIFICATION HAS INSTITUTED (SEPTEMBER 1842).	SLY FAILED AT THE SD 16 CPS. IT WAS DISCO 1 1862).	C PACTORY MMEN THEY WENED THAT THESE FIL	FAILED TO MEET TH JEAS MERE MANUFAC	
CORRECTIVE ACTION-A BUR	BURNET HAS INSTITUTED FOR ALL FILIERS MANUFACTURED BEFINGE SEFTENDER 1968. APPROXIMATELY SO FILT	MANUFACTURED BEFORE	SEPTEMBER 1968 . APPR	ORIMATELY SO FILT	
				Best Dree	

CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

STSTEN SIG-STSTEN	TEST/REPORT HUNGER FALLED COMPONENT MANE	DIF DATA SOUNCE PART NUMBER	DATE DIF TIME DI	VENICLE SITE PRI VENDOR NAME DATE DIP TIME DIF OTH VENDOR PART NO	r
ERS NERE FOUND AND RETESTED.	10.	erengen gestellt for det er staterelle den gestellt in gestellte bestellt er sepa destinationeres Rege	de Base personale de la companya de		93330
AUTOFILOT- SAUMRE-A/B GTRO PACKAGE	4-AB-04-4739-F RATE - 6-PRO CANISTER	FAR R7-45043-803	32F FACTORY 840404	IY YEB HONETVELL HO	***************************************
FAILURE MODE-CONTANTMATION, DUBING MOMEN, WITH & PSIS APPLIED, LEAKAGE INDICATOR MOMNTED IN ONE END PLATE, & SUCH AS POTTING COMPOUND AND METAL		THE FINAL WENICLE CHECKOUT THE TWO RATE GYRO GROUP WAS NOTED LEAKING GASEOUS NIT WAS D.4 PRIS. IN 3 HINUTES. LEAKAGE WAS PAST THE SEALANT AROUND THE ELAPSED TIME LEAKAGE WAS ALSO CRISCRYED AT THE OTHER END PLATE BEAL. CONTAHINATION ON THE SEAL. PARTICLES WAS THE APPARENT CAUSE OF THE SEAL LEAKAGE.	IO GROUP WAS MOTE T THE REALANT ARC PLATE BEAL: CONT TAL LEMANCE:	D LEAKING GASEOUS NIT NAD THE ELAPSED TIME ANINATION ON THE BEAL	FIG. 100.7TH 51.7
CORRECTIVE ACTION-60/C	CORRECTIVE ACTION-60/C ASSEMBLY PERSONNEL AND INSPECTION APPRISED OF THE CONTAMINATION PROBLEM AND RECOMMENDATIONS ERE NADE TO REVIEW THE GLEANING PROCEDURES OF THE DID PLATES BEFORE ASSEMBLY.	N APPRISCID OF THE CONT. LAYES BEFORE ASSEMBLY.	MENATION PROBLES	AND RECOMMENDATIONS	
AUTOFILOT-SAUMEE-A/B 67RO PACKAGE	A-99-04-4784-F 3000 BAMO PASS FILTER	FAR 27-04948-3	640331 FACTORY	7 YES APPLIED COMPON NO ENT	
FAILURE MODE-OUT OF TOLI	TOLERANCE-DURING FACTORY BAS-ASSESSLY TESTING THE BAND PASS FILTER GAVE A NO-60 INDICATION.	LT TESTING THE BAND PA	10 FILTER 644E A	MO-60 INDICATION.	······································
CORRECTIVE ACTION-HOME.	FAILURE NOT CONTINED.				
AUTOPILOT-SAIMME-A/B GTRO PACKAGE	BLV-09-04-4756F SARD CORRECTOR	7AR 27-43105-3	840384 FACTORY	7 YES	
FAILURE MODE-BIRUCTURAL 25 WOLT 77-7, FAILURE W LD MOT BE CATERHINED.	FAILUME HODE-BIRUCTURAL. SPIN HOTOR ROTATION DETECTOR BUB-ABBERRLY I HAB REJECTED DUE TO INTERHITTENT OUTPUT DURING. 25 VOLT 17-7, FAILUME WAS DUE TO PIN I BREAKING WHILE BEING PLUGGED INTO NEXT ABSEMBLY. CAUSE OF PIN I BREAKING COU D HOT BE GETERHINED.	AB-ABBEMBLY 1 WAS PEUT LING PLUGGED INTO MENT	TED DUE TO INTER ABSEMBLY. CAUSE	MITENT OUTPUT BURING OF PIN 1 BREAKING COU	
CORRECTIVE ACTION-NOME.	NO ACCURATE CAUSE OF THE PAILURE COULD BE DETERMINED.	COULD BE DETERMENTO.		es legenda principal de la constanta de la cons	
AUTCESSOF-SQUARE-A/B	LV-99-04-4762F Bee'd TRANSIBTOR	718 7143168-9	640320 FACTORY	5 0	*****
'ASLURE MOCE-ELECTRICAL THE CHECKOUT COMPOLE. PAINTS	"ASSUME WOCHESTRICAL OPEN, THE BRIN MOTOR ROTATION DETECTOR SUBASSEMBLY I WAS REJECTED WHEN IT MAD WO OUTPUT OM THE CHESSOUT COMPOLE, PAILURE WAY DUE TO A DEPECTIVE TRANSISTOR (4-1). THE INTERNAL BASE LEAD WAS MELTED OPEN, BELLE WED TO BE CAUSED BY AN INADVERSENT APPLICATION OF 138Y, 400 CYCLE POWER TO THE BAND CIRCUIT.	LTECTOR BUBASSEMBLY 1 4818TOR (4-1). THE INTI 100 CTELE POWER TO THE	AB REJECTED WHEN IRMAL BASE LEAD W BUND CIRCUIT.	I IT MAD NO CUTPUT CH MB HELTED OPEN. BELIE	
CORECTIVE ACTION-60/C /	CORECTIVE ACTION-60/C ALERTED APPROPIATE DEPARTMENTS RESARDING THE FAILURE. NO OTHER ACTION NAS TAKEN SECAUSE THE	GARDING THE PAILURE.	40 OTHER ACTION O	LIB TAKEN BECAUSE THE	
enement enemente ene				4080 3574	

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	OTH VENDOR PART NO	75a aass7e	OT BE TESTED BECAU E GREAK WAS AT THE	YES A.C.ELECTRONIC 891085 NO 8	LUIT IN THE PRIMAR AS NOT DETERMINED	NO MONETAELL 885563	FEEDTHGOUGH TERNI LING. THE INSULATI MILL MAINTAIN BUR	YES 4D/C 898787	TO TEAPERATURE SENS WHICH IS NO LONGER	194 AF.	-
A The second of	DATE DIF TIME DEF	640320 FACTORY Y	TED WAEN IT COULD NO ME CINCUIT BOAND. THE	GADSIB PACYORY Y	IUTED TO AN OPEN CIRCIER. CAUSE OF ABOVE N	SAUSIS P FACTORY Y	THE TOROUGH WINDING FEEDTHROUGH TERMITED TO THE MOTOR HOUSING. THE INSULATION TO THE INSULATION TO THE MAINTAIN BURE	32F FACTORY Y 840317 FACTORY Y	AILUME ATTRIBUTED TO D THE CR-1 DICDE, WH	ECP INS CANCELLED BY	
POFILOT SYSTEM-AIRBOR	DIF DATA SOUNCE PART NUMBER	FAR 87-48165-8	ASSEMBLY 1 WAS REJECT WAS REJECT TOWN THE WAS REMOVED PROMITED OF MISHAMBLING.	FAR R7-04160-3	CASE. PAILURE ATTREBAUSED THE CASE TO CRA	FAR 27-04574-3	TED TORGUER WINDING. B FOUND SHORT CIRCUIT E POTTING HATERIAL. TYPE AND EXACT CAUSE	FAR E7-43145-3	T ACCOMDING TO EOP. P TAIR PROBLEM INVOLVE -4747F.	D OTHER CHAMBES. THE	
BIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORM	TENT/REPORT HUMBER FAILED COMPONENT NAME	A-BS-D4-4785 BARD COMMETOR	. SPIN MOTOR ROTATION DETECTOR BUS ASSENDLY I WAS REJECTED WHEN IT COULD NOT BE TESTED BECAU H THE MODULE. IT WAS BROKEN WHEN IT WAS REMOVED FROM THE CIRCUIT GOARD. THE GREAK WAS AT THE E DETERNINED WHETHER IT WAS A POOR WELD OR MISHAMDLING. CAUSE COALD NOT BE DETERNINED.	A-99-04-4737F TRAMSFORMER MIRING	FAILURE HODE-OFCH ELECTRICAL, UNIT REJECTED FOR A CRACKED CASE, PAILURE ATTRIBUTED TO AN OFCH CIRCUIT IN THE PRIMAR. T WINDING, HEAT, CAUSED BY EXCESSIVE CURRENT, APPARENTLY CAUSED THE CASE TO CRACK, CAUSE OF ABOVE MAS NOT DETERMINED.		FAILURE HODE-CONTANTMATION, GYRO ENHIBITED A SHORT CIRCUITED TORGUER WINDING, THE TORGUER WINDING FEEDTHROUGH TERMINAL, ON THE TORGUER SIDE OF THE HOTOR HOUSING, THE INSULATION RESISTANCE BROKE DOWN APPARENTLY DUE TO MEMESIUM IN THE POTTING MATERIAL. CORRECTIVE ACTION-NOME, THIS IS THE PIRST FAILURE OF THIS TYPE AND EXACT CAUSE IS NOT KNOWN, 66/C MILL MAINTAIN SUR	4-99-D4-473EF BMED MOLAE-DEODE	FAILURE WOOK-OUT OF TOLERANCE, UNIT REJECTED FOR NO OUTPUT ACCORDING TO EOP. FAILURE ATTRIBUTED TO TEMPERATURE SENI ITIVITY IDENTICAL TO 21 OTHER HODULES PREVIOUSLY REPORTED. THIS PROBLEM INVOLVED THE CR-1 DIODE, WHICH IS NO LONGER WAED, TWO SINGLAR CASES REPORTED IN PAR A-99-04-4744F AND -4747F.	CORRECTIVE ACTION-ECP 7456 MAS BUSHITTED TO COVER THIS AND OTHER CHANGES. THE ECP WAS CANCELLED BY THE AP.	
#961 #37 #1	8787EH 816-818H	AUTOFILOT-SQUARE-A/B	FAILURE MODE-STRUCTURAL. BE PIN 4 MR HIBSING FROM MELD POINT. COALD HOT BE CORRECTIVE ACTION-HOME. C	AUTOFILOT- SQUARE-A/B	FAILURE MODE-OFFN ELECTR Y WINDING, HEAT, CAUSES B		FAILURE MODE-CONTANTMATTON MAL, ON THE TORGUER SIDE OF ON RESISTANCE BROKE DOWN AP CORRECTIVE ACTION-NOME, TH WELLANCE OF THIS CONFORM?	AUTOFILOT-BOURE-A/B	FAILURE MODE-OUT OF TOLE STEVETY IDENTICAL TO 21 O UMED, TWO BIMELAR CAMES M	CORRECTIVE ACTION-GCP 74	

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSCRME

	STATEM SUD-STATEM	TESTARFONT WUBER PAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	BITE TIME DIF	- X	VENDOR NAME	
	AUTOFILOT-BRUNE-A/B	69A2694.1 DISPLACEMENT STRO PACKASE	UTP-8LT 68-41008-613	*1107*	5/0 5	7E8 60/C	3/0	•
	FAILUME MODE-BTRUCTURAL	PAILUME MODE-BIRUCTUMAL. BPIN MOTOR TRANSFORMER INSERT MAB LOOSE, ELAPSED TIME INDICATOR DIAL MAB ARKEW, AND POMER Group Housing (27-43185-3) Mad Nairline Crack in Netal, Refer to far 184 AND 184A.	& LOOSE, ELAPSED TIME FER TO FRR 184 AND 16	: INDICATOR	3 1410	10 ABK	W. AND POMER	
	CORRECTIVE ACTION-1) MAI ED TO ASSURE SCREMA ARE H METAL.	CORECTIVE ACTION-1) MAMFACTURING PROCESS SPEC 24. 22.1 CALLS FOR USE OF LACTITE AND SURVEY INSTRUCTION 58-65 ISSU ED TO ASSURE SCREWS ARE ADEQUATELY SECURED, 2) WO ACTION REQUIRED.3) RETEST USING DUMY PACKAGE REVEALED NO CRACKS I H METAL.	CALLS FOR 18E OF LACT EQUIRED.S) RETEST UB:	TTE AND B	RVEY IN	FYEALE	ON 58-65 138U	
	AUTOFILOT-SQUARE-A/B GTNO PACKAGE	69A2684.1 8MCD	UTP-SLT 68-41002-818	•40314	y. 03	YES 60/0)/Q	****
	FAILURE HODE-ELECTRICAL OPEN, DURING D BURASSEMBLY MO.S HAD FOOR SFOT WELD	OPEN, DURING BLT (R/B) VIBRATION, BA-D SIGNAL IND OOR SPOT WELD GROKEN, REFER TO FRR 164 AND 164A.	BLT (RZB) VIBRATION. BHAD SIGNAL INDICATED NO-60 AT DIFFERENT PRESUENCIES. SHE GRONDIU. REFER TO FRR 164 AND 164A.	A 03-04 G	DITTEN	E	GUENCIES. SHE	
	CORRECTIVE ACTION-CONTIL	CORRECTIVE ACTION-CONTINUE BUALITY CONTROL BURVEILLANCE.						
	AUTOFILOT-SQUARE-A/B	60A2664.1 808D	UTP-3LT 69-41002-813	640316	3/ 05	VES 60/C	٥/ د	\$500
	FAILURE MODE-FAILURE DU IES. SHOD SUBASSEMBLY MO	FAILURE MINE-FAILURE DURING OFERATION-DURING SLT (R/S) VIBRATION, SURO SIGNAL INDICATED NO-60 AT DIFYERENT FREGUENC ES. SURD SUBASSEDURLY MO.1, CHANNEL 4 NOT BONDED TO CIRCUIT BOARD (R7-43/229-3), REFER TO FRR 164 AND 184A.	BRATION, SAMO BIGNAL INDICATED NO-60 AT DIFFERENT BOARD (E7-ASEED-3). REFER TO FRR 164 AND 184A.	INCICATED REFER TO	NO-60 A	AND 18	RENT FREGUENC 44.	ورداد المارية والمارية
	CORRECTIVE ACTION-CONTINUE GUALITY CONTROL	IME GUALITY CONTROL MANGILLANCE.	- Design and the control of the cont	er und de la companie			and the second of the second o	
	AUTOFILOT-SQUARE-A/B	LV-AB-O4-4737-F AMPLIFIER-TORBUING TRANSIBTOR	FAR 35-41002-825	1460	FACTORY	ž 3		•
1	FAILURE MODE-OUT OF TOLI TOROUING AMPLIFIER, FAIL ON FOR THE TRANSESTOR TEL	FAILURE MODE-OUT OF TOLERANCE. DURING FINAL CHECKOUT THE GYNO ABSEMBLY WAS REJECTED DUE TO NOM-LINEARITY OF THE YAW Tombuing amplifier, pailure was due to trambistor of that was temperature sensitive and had a low de Gain. The Read In for the transistor temperature bensitivity and the Low de Gain Could hot be deternined.	GYNO ABSEMBLY WAS REJ WAS TEMPERATURE SEMS DC GAIN COULD MOT BE	ECTED DUE 11 TI VE AND DETERNINER	TO MON-1 HAD A LC	INCARI Se DC e	TY OF THE YAM AIN. THE READ	
0	CORRECTIVE ACTION-MONE. TIAL PROBLEM AREA TO DETI	F-MOME, EXACT CAUSE OF FAILURE COULD MCT BE DETERHINED. 60/C INTENSIFIED SURVEILLANCE OF THIS POTEN TO DETERHINE IF ANY POLLOW UP ACTION WOULD BE RESUIRED.	DE DETERMINED. 60/C 1	MTCHBIFIE	SURVE1	TAKE.	OF THIS POTEN	

SENERAL DYNAMICS CONVAIR DIVISION

15 JUN 1966

9961 WOT SI	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥	
SYSTEM SUB-SYSTEM	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE PRI VENDOR PART NO DATE DIF THE DIF OTH VENDOR PART NO	VENDOR HAME ENDOR PART NO
AUTOFILOT-BAWRE-A/B	LV-AB-05-4720F RATE 67RO	FAR E7-41018-5	1460 PACTORY YES 640316 NO	• • • • • • • • • • • • • • • • • • • •
FAILURE MODE-OUT OF TOLELOW TOLERANCE. THE FAIL 6.	TOLERANCE. THE RENOTE RATE GROUP WAS REJECTED SECAUSE THE ROLL RATE 64TH WAS 16 TO 33 PERCENT SPALLINE HAS HOT CONFIRMED HONEVER A SLIGHT OUT OF TOLERANCE CONDITION WAS OBTAINED DURING TESTIM	JECTED BECAUSE THE HT OUT OF TOLERANCE	NOLL RATE GAIN WAS 16 TO 53 CONDITION WAS OBTAINED DURI	PERCENT B
CORRECTIVE ACTION-MONE, AUTOFILOT-SQUARE-A/B 67RO PACKAGE	LV-99-D4-4743F SHID SUBASSEMENT R	FAR 87-45168-3	MOSIL FACTORY YES 60/C	908739
FAILURE MODE-OUT OF TOLENAMEE. U A WELD FAILURE AT CAPACITOR C-5.	TOLENAMCE. UNIT REJECTED PUR IMMBILITY TO CALIBRATE IN ITS MENT ASSEMBLY. PAILURE ATTRIBUTED TO PACITOR C-S.	TO CALIBRATE IN 178	MENT ASSEMBLY. PAILUME ATTR	1807ED 10
CORRECTIVE ACTION-MANUF E AN HOURLY WELD BURLITY UNIT.	CORRECTIVE ACTION-MANUFACTURING SPECIFICATIONS MERE REVISED TO INCLUDE NEW PULL-STREWSTH REQUIREMENTS AND TO REQUIR E an Hourly Weld Quality Test, The Eop was revised to include verification of correct (utput wave form from the shed unit.	TO INCLUDE NEW PUL.	L-STREMETH REQUIREMENTS AND CRECT CUTPUT MAVE FORM FROM	TO REGULA THE SHED
AUTOPILOT - SQUARE - A/B GTRO PACKAGE	27-32134 RATE 67RO	UTP-PET 27-04574-5	840312 GD/C NO MINN. HO NO L MR101A3	MINN. HOMETWEL \$92007 L JRS101A3
FAILURE MODE-GUT OF TOL HOUR LIFE TEST, PROOF CY AT-30 DES F. DURING POR	FAILURE MODE-OUT OF TOLERANCE. BOTH GYROS FAILED TO NEET THE DAMPING RATIO LIMITS AT "50 DEG F DURING THE POST 100 MOUR LIFE TEST, PROSF FAILED TO NEET THE DAMPING RATIO LIMITS AT "50 DEG F, DURING POST PROOF CYCLE THIS WAS CAUSED BY BUILD UP OF TEST EQUIPMENT TOLERANCES.	E DAMFING RATIO LIN TEST, BOTH GYROS PA LD UP OF TEST EQUIP	ITS AT "30 DEG F DURING THE ILED TO MEET THE DANPING RAT MENT TOLERANCES.	POST 100 10 LIMITS
CORRECTIVE ACTION-TEST DAMPING RATIO LINITS. R	CORRECTIVE ACTION-TEST PROCEDURE REVISED TO CALL OUT TOLENANCES AND TYPES OF TEST EQUIPMENT TO BE USED MNEN READING Damping ratio linits. Rev. PR-654-2-252.	HCES AND TYPES OF T	EST EQUIPMENT TO BE USED WHE	M READING
AUTOFILOT-SAUARE-A/B GYRO PACRACE	CL-5MO-DE-46 STRO, DISPLACEMENT	COMPOSITE-PRD/DPL	46E 40/C 7ES 640310 C NO	
PAILURE MODE-OUT OF TOL	TOLERANCE. PITCH DISPLACEMENT BYRO BIB NOT MALL.	HOT HALL.		
	TION DOES NOT START.			
CORRECTIVE ACTION-UNKNOWN				
				PAGE DEBO
The second secon				

	12 104 1048	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	DEILOT SYSTEM-AIRBOR	¥		۲
SILV-SE-CAL-1787 SHEWED DIGGE SHUTHSOLD AND ANALYSES CH-1 DIGGE THAT INCLUDED A SHALL PIECE OF SILICOT AND ALWHHMM SHOULDS DETHEW THE ALWHIMMA AN ACTOMS CH-2 DIGGE THAT INCLUDED A SHALL PIECE OF SILICOT AND ALWHHMM SHOULDS DETHEW THE ALWHIMMA AN ACTOMS CH-2 DIGGE THAT INCLUDED A SHALL PIECE OF SILICOT AND ALWHMM SHOULDS DETHEW THE ALWHIMMA AN ACTOMS LV-SE-CAL-172-F ST CLERANCE. THO MEDILES WERE REJECTED FOR NO CUTPUT. THE PAILURES MERE CAUSED BY INSPORTS WANTOO THE SHOOL WAS REJECTED. LV-SE-CAL-173-F ST CLERANCE. THO MEDILES WERE REJECTED FOR NO CUTPUT. THE PAILURES MERE CAUSED BY THE SECTE SHOOL AND ANS ATTRIBUTED HAVE COMPACT. THE MEDILES WERE REJECTED FOR NO CUTPUT. THE PAILURE WAS CONTINUED AND WAS ATTRIBUTED ST CLERANCE. THE MEDILE WAS REJECTED FOR NO CUTPUT. THE PAILURE WAS CONTINUED AND WAS ATTRIBUTED ST CLERANCE. THE MEDILE WAS REJECTED FOR NO CUTPUT. THE PAILURE WAS CONTINUED AND WAS ATTRIBUTED ST CLERANCE. THE MEDILE WAS REJECTED. THE ST CLERANCE TO CORRECT SHOW PROBLESS BY REJECTED. ST CLERANCE. THE MEDILE WAS REJECTED. ST CLERANCE. THE MEDILE WAS REJECTED. THE WAS FOUND THE STATE OF THE STA	STSTEM SLB-STSTEM	TEST/REPORT NUMBER FAILED COMPONENT MANG	DIF DATA SOURCE PART HUMBER	VEHICLE BITE DATE DATE OF C	AT VENDOR NAME	
TO CONTINUENTIAL DEVICES CORPORATION TO INSTITUTE PROCESS CONTROLS TO PREVENT HANNEACTURING AND COTORS. THE THE LOGE THAT THE LOGED A SHALL PIECE OF SILICOR AND ALWINNAM ANDMICHED BETWEEN THE ALUMINAM AND COTORS. THE THE THE LOGED A SHALL PIECE OF SILICOR AND ALWINNAM ANDMICHED BETWEEN THE ALUMINAM AND SHALL SHALL DEVICES CORPORATED TO THE SHALL SHALL DEVICE TO THE PAILURES MORE CAUGED BY IMPROPER MANEROPELY OF STATEMENT THE PAILURES MORE CAUGED BY IMPROPER MANEROPELY OF STATEMENT THE PAILURE WAS CONFIDENT TO SHOW THE SHALL WAS POSSESTED FOR NO OUTPUT. THE PAILURE WAS CONFIDENT TO SHOW THE SHALL WAS RELECTED FOR NO OUTPUT. THE PAILURE WAS CONFIDENT AND MANASCHALLY ON THE THAT SHALL SHALL WAS RELECTED FOR NO OUTPUT. THE PAILURE WAS CONFIDENT AND MANASCHALLY ON THE SHALL WAS RELECTED. THOSE AND SHALL SHALL SHALL WAS REJECTED. THE THAT THE PRODUCT WAS RECOVED TO SHALL	AUTOPILOT-SALARE-A/B GTRO PACKAGE	8LV-#8-04-4788F 8440 DICOE	FAR 27-43196-8	FACTORY	.	11884
FYAR TO CONTINENTIAL DEVICES CORPORATION TO INSTITUTE PROCESS CONTROLS TO PREVENT MANUFACTURING F SHOULD SEED STATEMENT OF REJECTED FOR NO GUTPUT. THE PAILURES MERE CAUSED BY INFROMER NAME/OF SET CATANCE. THO MODILES MERE REJECTED FOR NO GUTPUT. THE PAILURES MERE CAUSED BY INFROMER NAME/OF SET CATANCE. THO MODILES MERE REJECTED FOR NO GUTPUT. THE PAILURE NAS CONTROL BY ESD.C SHOULD SHARESCHATO OF FAR ESCHED FOR NO GUTPUT. THE PAILURE WAS CONTROL AND WAS ATTRIBUTED F TOLERANCE. THE MODILE WAS REJECTED FOR NO GUTPUT. THE PAILURE WAS CONTROL AND WAS ATTRIBUTED F TOLERANCE. THE MODILE WAS REJECTED FOR NO GUTPUT. THE PAILURE WAS CONTROL AND WAS ATTRIBUTED F TOLERANCE. DURING THE POOL VISIANTION PROCE CALL TEST, THE DRIFT OLD. THE TEST GUTPUT IS SHOULD SHARED AS "E-SI DECREES/MODAN. RENAM REJECTED. HEADON TO CAUSE THIS NEGATIVE. TO PAULE O'S BOBY. THE STATES AND ENUTHER. SOCK HAS BEEN ATTRIBUTED SOCK AND THE VENDOR SECRET/MODAN. RENAM REJECTED AS A BANDOM FAILURE. SOCK HAS BEEN OF PROCESSIONS THE READING TO CAUSE THIS NEGATIVE. SOCK HAS BEEN PROCESSIONS THE BEATINGS AND THE RETAINES AND THE STATEMES. THE PROCESSIONS THE BEATINGS AND THE WEADON. FINANCIAL SHARE OF DETERIORATION. PRODOK CLASSIFIED THIS DETERIOR SHARE SHARE AS A SANDOM FAILURE. SOCK HAS BEEN PROCESSIONS THE BEATINGS AND THE RETAINES AND THE STATEMES. SET CTCH NO. 355-3-008.	FAILURE MODE-CONTANINAT DUE TO A DECREPIT CR-S & CRYSTAL SENI-COMDUCTOR	TION, THE BURD BURNABEPRIT R MAS RED DIODE THAT INCLUDED A BMALL PIECE OF	JECTED WHEN IT FAILE F BILICON AND ALUNIN	D THE DIODE LEAKAGE UM BANDVÍCHED BETWEE	TEST, FAILURE WAS N THE ALUMINUM AN	
LU-98-06-47EZ-F JAMED SUBARACHELY ONE RT-45185-5 MODILES MERR REJECTED FOR NO GUTPUT. THE FAILURES MERE CAUSED BY IMPROPER NAMEFOR TOLINAME. TOLINAME. THE SHED TEST SET SIGNAL WAS CORRECTED. LU-98-06-470-F SHED SUBARSCHALT ONE RT-43185-Z SHED SUBARSCHALT ONE RT-43185-Z SHED SUBARSCHALT ONE RT-43185-Z FAR SHED SUBARSCHALT ONE RT-43185-Z SHED SUBARSCHALT ONE SHED SUBARSCHALT SHED SUBARSCHALT ONE SHED SUBARSCHALT SHE	CORRECTIVE ACTION-PEAR	TO CONTINENTIAL DEVICES CORPORATION	TO INSTITUTE PROCES	S CONTROLS TO PREVEN	T MANUFACTURING F	······································
WET GUITHUT. WE TOLERANCE. THO MODULES WERE REJECTED FOR NO GUITHUT. THE FAILURES WERE CAUSED BY IMPROPER NAWEYON TOLERANCE. THO MODULE WAS CORRECTED. SHOULD SUBASSENGLY ONE FAR 640304 FACTORY YES GOVE SHOULD SUBASSENGLY ONE FETTINGS TO THE FAILURE WAS CONTINED AND WAS ATTRIBUTED. FOLERANCE. THE MODULE WAS REJECTED FOR NO OUTPUT. THE FAILURE WAS CONTINED AND WAS ATTRIBUTED. FILLY SECENTIAL WOLLAGE OROP ACROSS DIOSE CAT, AND IMPROPER WAYE FORN OF THE TEST SET QUIPHUT SUBALACED. FOLERANCE. DURING THE POOT VISRATION PROOF CYCLE TEST, THE ORITY DUE TO MASS UMBALANCE ALONG THE STANDS AND GAULTHEN TO DES./MS. AND THE WENDOS AND GAULTHEN TO DES./MS. AND THE WENDOS AND GAULTHEN TO DES./MS. AND THE WENDOS (KEARFOTT) HAVE CONDUCTED A TEANDOM MALLYSIS ON THIS SYNO, THE WOTCH BEARINGS AND THE WENDOR (KEARFOTT) HAVE CONDUCTED A TEANDOM MALLYSIS ON THIS SYNO, THE WOTCH BEARINGS AND THE WENDOR (KEARFOTT) HAVE CONDUCTED A TEANDOM MALLYSIS ON THIS SYNO, THE WOTCH BEARINGS AND THE WENDOR (KEARFOTT) HAVE CONDUCTED A TEANDOM MALLYSIS ON THIS SYNO, THE WOTCH BEARINGS AND THE WENDOR (KEARFOTT) HAVE CONDUCTED A TEANDOM MALLYSIS ON THIS SYNO, THE WENDOR CLASSITIED THIS DETERIORATION AS A RANDOM FAILURE. 40/C HAS REDOR TROCESSIONS THE BEARINGS AND THE WENDOR CLASSITIED THIS DETERIORATION. YEAROOM MALLYSIS ON THIS SYNO, THE WOLLD THE WENDOR CLASSITIED THIS DETERIORATION AS A RANDOM FAILURE. 40/C HAS REDORDED THE WOLLD THE WENDOR CLASSITIED THIS DETERIORATION. THE WOLLD THE WENDOR THE WENDOR. THE WOLLD THE WENDOR	AUTOFILOT-SEUARE-A/B 67RO PACHASE	l -	FAR 27-43185-5	FACTORY		*****
LV-99-04-4730-F LV-99-04-4730-F SHOD SUBASSCRLY ONE R7-43185-Z SHOD SUBASSCRLY ONE R7-43185-Z SHOD SUBASSCRLY ONE R7-43185-Z P TOLERANCE. THE MCDULE WAS REJECTED FOR NO OUTPUT. THE FAILURE WAS CONTINED AND WAS ATTRIBUTED ITTUITY, EXCESSIVE VOLIAGE DROP ACROSS DICIDE CAL, AND IMPROPER WAY FORM OF THE TEST SET CATPUT S ITTUITY, EXCESSIVE VOLIAGE DROP ACROSS DICIDE CAL, AND IMPROPER WAY FORM OF THE TEST SET CATPUT S SHOLLY OF TO CORRECT SHED PROBLEMS WAS REJECTED. 640302 CD/C YES REARFOLT DISPLACEMENT OF TO CORRECT SHED PROSP CYCLE TEST, THE DRIFT DUZ TO MAJS UMBALANCE ALONG THE IS NAS MCANAGE. F TOLERANCE AS -2.51 DECREES/MOUR, RERUM PESALTS MERE -2.48 DES/MR. BOTH RESULTS ARE MORE THA 18 NAS MCASARED AS -2.51 DECREES/MOUR, RERUM PESALTS MERE -2.48 DES/MR. BOTH RESULTS ARE MORE THA 60/C AND THE VENDOR (KEARPOTT) HAVE CONDUCTED A TEARDOMS AMALYSIS ON THIS SYRO, THE MOTH BEARING BALY STAGE OF DETERIORATION, YENDOR CLASSIFIED THIS DETRICORMS AND HALDER. 90/C HAS RE DIS OF PROCESSING THE BEARINGS AND THEIR RETAINERS. REF. CTCTH MO. 534-5-008.	. .		OR NO CUTPUT. THE PL	ILURES NERE CAUSED I	Y EMPROPER MAVEFO	
LUT-09-04-470-F SHED SUBASSENALY ONE RT-43185-Z SHED SUBASSENALY ONE RT-43185-Z SHED SUBASSENALY ONE RT-43185-Z SHED SUBASSENALY ONE RT-43185-Z F TOLERANCE. THE HODULE WAS REJECTED FOR NO OUTPUT. THE FAILURE WAS COMPIRED AND WAS ATTRIBUTED ITIVITY, EXCESSIVE VOLTAGE DROP ACROSS DICOE CAL, AND IMPROPER WAVE FORM OF THE TEST SET OUTPUT S ITIVITY, EXCESSIVE VOLTAGE DROP ACROSS DICOE CAL, AND IMPROPER WAVE FORM OF THE TEST SET OUTPUT S SHELL SHEAR FORM OF THE SHEATON PROOF CYCLE TEST, THE ORIET DUC TO MAJS UMBALANCE ALONG THE SHEAT FROM THE ISPTYAT VALUE OF PLUS 0.38 DES./HRTESTING METHODS AND EQUIPMENT CON. HEARDE TO CAUSE THIS READING TO BE OUT OF TOLERANCE. SALT STAGE OF DETERICANTION, VENDOR CLASSITED THIS DITERIORATION AS AND CALIBRE. SOLV HAS RED DO OF PROCESSIONS THE BEARING SHEAT SHEET SET SHEET SET SHEET SHE	CORRECTIVE ACTION-14 VET	Ĭ	CORRECTED.			
FIGURANCE. THE HODILE WAS REJECTED FOR NO OUTPUT. THE PAILURE WAS COMPIRED AND WAS ATTRIBUTED STITLING. HOWE. AN ECP TO CORRECT SHED PROBLEMS DIODE CAL, AND IMPROPER NAVE FORM OF THE TEST SET GUTPUT S SECALTA BESCALTA OF THE PROBLEMS THE POST VIBRATION PROOF CYCLE TEST. THE DRIFT DUE TO MAJS UNBALANCE ALONG TH IS WAS HEASURED AS -E.S. DECREES/POUR. RERUN PESULTS WERE -E.A. DEG/HR. BOTH RESULTS ARE HONE THA O DEE./HR. SHIPT FROM THE ISPT/IAT VALUE OF PLUS 0.36 DES./HRTESTING WETHOUS AND EQUIPMENT COUL HEAROR TO CAUSE THIS READING TO BE OUT OF TOLERANCE. DE OF THE VENDOR (KEARPOTT) HAVE CONDUCTED A TEARDOMA MALEYSIS ON THIS SYRO. THE WOTCH BEARING BALE DESCRIPTIONATION. YENDOR CLASSIFIED THIS DETERIORATION AS A RANDOM FAILURE. SO/C HAS RE DE OF PROCESSING THE BEARINGS AND THEIR RETAINMERS. REF. CTCTH NO. 536-5-008.	AUTOFILOT-SQUARE-A/B	, »,	7AR 27-43105-2	FACTORY	E3 60/c	******
HONE, AN ECP TO CORRECT MAD PROBLEMS WAS REJECTED. 685CA174 DISPLACEMENT 6YRO T-04250-601 T-04250-601 T-04250-601 NO CTORROSOS NO CTORROSOS TO DES./HR. BATTOM PROOF CYCLE TEST, THE DRIFT DLE TO MAJS UMBALANTE ALCHE THA SO DES./HR. BATTOM THE ISPT/IAT VALUE OF PLUS 0.36 DES./HRTESTING METHODS AND EQUIPMENT COUN. HEAROR TO CAUSE THIS READING TO BE OUT OF TOLERANCE. 60/C AND THE VENOOR (KEARFOTT) HAVE CONDUCTED A TEARDOMM AMALYSIS ON THIS 6YRO, THE WOTCH BEARING DAS OF PROCESSING THE BEARINGS AND THEIR RETAINERS. SEP. CTCTH NO. 356-5-008.	FAILUNE MODE-OUT OF TON TO TEMPERATURE SENSITIVI IGMAL.	LENANCE, THE HODULE WAS REJECTED FOR ITY, EXCESSIVE VOLTAGE DROP ACROSS D	NO CUTPUT. THE PAIL ICDE CALL AND IMPROP	LIRE NAS CONTENED AS ER NAVE FORM OF THE	D WAS ATTRIBUTED TEST SET CUTPUT S	
69CA174 DISPLACEMENT 6YRO T-04250-801 P-04250-801 P-04	CORRECTIVE ACTION-NOME.		B REJECTED.	-	e de la constitución de la const	
FAILURE MODE-OUT OF TOLERANCE. DURING THE POST VIBRATION PROOF CYCLE TEST, THE DRIFT DUE TO MAJS UMBALANCE ALONG THE E SPIN REFERENCE AXIS WAS MEASURED AS "E.48 DES/HR. BOTH RESULTS ARE HORE THAT IN THE ACCEPTABLE 3.0 DEE./HR. BATT FROM THE ISPTZIAT VALUE OF PLUS 0.36 DES./HR. TESTING HETHODS AND EQUIPMENT CON. D ACCOUNT FOR EMOUGH EAROR TO CAUSE THIS READING TO \$10.00 TO TOLERANCE. CORRECTIVE ACTION-60/C AND THE VENDOR (KEARFOTT) HAVE CONDUCTED A TEARDOM AMALYSIS ON THIS 67RO. THE MOTUR BEARING S MERE AT A WERY EARLY STAGE OF DETERIORATION. YENDOR CLASSIFIED THIS DETERIORATION AS A RANCOM FAILURE. 60/C HAS RECOMMENDED MEN METHODS OF PROCESSIAN THE BEARINGS AND THEIR RETAINERS. REF. CTCTH MO. 354-5-008.	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	69C4174 Displacement 6YRO	UTP-PET 7-04250-601	2/67	_	***
VENDOR (KEARFOTT) HAVE CONDUCTED A TEARDOMN ANALYSIS ON THIS SYNO, THE MOTO DETERIORATION, VENDOR CLASSIFIED THIS DETERIORATION AS A MANDON FAILURE, SO ISME THE BEARINGS AND THEIR RETAINERS. REF. CTCTH NO. 356-5-008.	FAILURE MODE-OUT OF TOU E SPIH REFERENCE ANIS WE IN THE ACCEPTABLE 3.0 DEN D ACCOUNT FOR EMOUGH EMI	LERANCE. DURING THE POST VIBRATION PAS MEASURED AS -E.61 DEGREES/HOUR. R E./HR. SHIFT FROM THE ISPT/IAT VALUE ROR TO CAUSE THIS READING TO BE OUT	ROOF CYCLE TEST, THE ERUM RESULTS MERE -1 OF PLUS 0.36 DES.//	ORIFT DUE TO MAJS (1.48 DEG/HR. BOTH RE: RTESTING METHODS (1.40 DECHODS)	MBALANCE ALONG TH LULTS ARE MORE THA IND EBUIPHENT COLA	
1874. 0801	CORRECTIVE ACTION-60/C B HERE AT A WERY EARLY I COMMENDED NEW METHODS OF	VENDOR DETERIO	UCTED A TEARDOAN AND FIED THIS DETERIOR AND RETAINERS. REF. CTC.	LYSIS ON THIS 67RO. ITICH AS A RANDOM FA. H NO. 536-5-008.	THE MOTOR BEARING LURE, 50/C MAS RE	
	aparierium/dipreparierium/dipreparierium/dipreparierium/dipreparierium/dipreparierium/dipreparierium/diprepari				PASE ORSI	

GENERAL DYNAMICS CONVAIN DIVIBION DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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STREM SUB-STREM	TEBT/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE	PRI VENDOR NAME OTH VENDOR PART ND	
AUTOPILOT-SQUARE-A/B GTRO PACKASE	A-88-04-4784F SHIG SUBASSEMBLY ONE	FAR 87-43189-3	640227 FACTORY	YEA 60/C HO	9705
FAILURE WODE-SHORT, ELECT M. LEADS TWO AND THREE. THE IBBOM ATTACHED TO LEAD 3.	FAILURE WODE-SHORT, ELECTRICAL, THE SUBASSEMBLY HAD NO GUTPUT AFTER ENCAPSULATION BECAUSE OF A SHORT CIRCUIT BETHEE IN LEADS TWO AND THREE. THE RIBBON ATTACHED TO LEAD THG HAD BEEN BEHT PRIOR TO ENCAPSULATION SO THAT IT TOUCHED THE R ISBON ATTACHED TO LEAD 3.	HUT AFTER ENCAPSULAT BEEN BENT PRICR TO E	ION BECAUSE OF A SM MCAPSULATION SO THA	COT CIRCUIT BETHEE 1 IT TOUCHED THE R	
CORRECTIVE ACTION-A PRO-	HA PROTECTIVE SLEEVE MAS ADDED TO THE RIBBON CONNECTING LEAD THREE TO LEAD SIX TO PREVENT SHORTING AND THREE ON PUTURE MARDMARE.	BOL COMECTING LEAD	THREE TO LEAD BIK T	O PREVENT SHORTING	
AUTOPILOT-SAUME-A/B	CT-98-04-136P D13PLACEMENT 67RO	FAR 55-41002-621	1350 ETR 640287	5,03 OX	88788
FAILUME MODE-OUT OF TOLL	FAILUME MODE-OUT OF TOLERANCE. THIS UNIT AND ITS MATCHED RATE GYRO, P/M 59-41018-5, MAS REJECTED FOR LOW OUT-OF-TOL ERANCE READINSS. FAILUME MAS ATRIBUTED TO IMBUFFICIENTLY ACCURATE TEST BETS FOR THE ACCURACY REQUIRED OF THE STROS.	ATE UYRO, PZN 35-410 CCURATE TEST SETS FO	19-5, MAS REJECTED R THE ACCURACY REGU	FOR LOW OUT-OF-TOL. IRED OF THE STROS.	
CORRECTIVE ACTION- REDE!	CORRECTIVE ACTION- REDESIGN OF TEST ACT RECOMENDED TO COTAIN A. U.S. PERCLNT ACCURACY AND REDESIGN OF THE SYNO PACKA SE TO PROVIDE HIGHER REPEATABILITY OF BLAVING SCHBITIVITY READINGS.	AIN A. U.S. PERCLINY AC EADINGS.	CURACY AND REDESIGN	OF THE SYNO PACKA	
AUTOPILOT - PEUARE - A/B EYRO PACKAFE	89AZ685.1 548D	UTF-81.7 00-43C45-3	\$40225 40/C	7£3	1000
FAILURE MODE-OUT OF TOLE BETHEEM 400 - 430 CPB U. 140.	OF TOLERANCE. DURING BLT R/S VISRATION - TEMP. TEST SHOO PHES WAS HIGH DUE TO HECHANICAL RESONANCE CPS causing motion betheen Pick opp and spin motor thereby senerating extra pulses. Reper to prr	TDJP. TELT SHOO PREG BPIN NOTOR THEREBY S	WAS HIGH DUE TO ME ENERATING EXTRA PUL.	CHANICAL RESONANCE SCS. REPER TO PRR	
CORRECTIVE ACTION-MONE.			a de de la companya d		
AUTOFILOT-SQUARE-A/B	69AE685.1 RATE 67RO PACKAGE	UTP-8LT 69-43048-3	640225 60/C	7C3	27.000
FAILURE MODE-OUT OF TOLE DURING WIBRATION, REFER T	of Tolebance. During bly R/B vibration Temperature, Yaw and Pitch Syrob had excessive total mulib Reper to par 140. Caused by Amgular Vibration Crobs Talk.	HERATURE, YAM AND P FLOW CROSS TAUK.	ITCH SYRON HAD EXCE	BBIVE TOTAL MULLS	
CORRECTIVE ACTION-HOME.			es esta productiva proprio productiva de la constanta de la constanta de la constanta de la constanta de la co		

GENERAL DYNAMICS

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BIFFICULTIES REVIEW-AUTOFILOT STREM-AIRBORNE

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SYSTER BUB-SYSTER	TEST/REPORT NUMBER DIF DATA SOURCE FAILED COMPONENT NAME PART NUMBER	DIF DATA SOURCE	VEHICLE DATE DIF	317E	10	VENDOR HAME VENDOR PART NO	
AUTOFILOT-SQUARE-A/B GYRO PACHAGE	LV-88-D4-4717F D18FLACENENT 6YRO	FAR 7-04230-803	640224	FACTORY	ដូទ្ធ	YES KEARFOIT NO C-70-2506-000	994096
FAILURE MODE-DRIFT, THE CONFIRMED IN THE GYRO A	FAILURE MODE-DRIFT. THE GYRO WAS REJECTED BECAUSE THE MAIN GYRO PACKAGE MAD MIGH DRIFT DURING TEST. THE FAILURE MAS Confirmed in the gyro and was attributed to a failure of the thermostat causing overheating and danage to the Gyro.	GYRO PACKAGE MAD MI NE THERMOSTAT CAUSIN	GA DRIFT D G OVERHEAT	CR1346 76 146 AND	BT. T	HE FAILURE MAS E TO THE GTRO.	
CORRECTIVE ACTION-MOME.							
AUTOFILOT-SAUARE-A/B GYRO PACRASE	LV-88-04-4716-F ANHLIFIER/CAPACITOR	FAR R7-78585-5	640221		ž š		884078
FAILURE MODE-OUT OF TOLURE MAI CAUSED BY A DEFE 15 HICKGRARD ED VOLT CA MARACTURING DEFECT.	F TOLENANCE. THE MAIN GYRO CANISTER WAS REJECTED FOR LOW AND DISTORTED ROLL RATE OUTPUT, THE PAIL DEFECTIVE CAPACITOR OF THE CAPACITOR, A LT CAPACITOR, WAS INTERHITTENT, DISSECTION OF THE CAPACITOR REVEALED NO SILVER ON THE ANDRE, A MA	REJECTED FOR LOW AND IL AMPLIFIER, PART N ON OF THE CAPACITOR	DISTORTED LHBER E7-4 REVEALED H	ROLL RA 1379-817 O SILVER	# . g	TPUT, THE PAIL. CAPACITOR, A HE ANODE, A MA	
CORRECTIVE ACTION-NOME. RAY-TELEVISION DEVICE.	. PRESENT PRACTICE IS TO INSPECT THIS TYPE CAPACITOR IN RECEIVING INSPECTION USING VIDICON	A TYPE CAPACITOR IN	RECEIVING	INSPECT	3	ING VIDICON K-	
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	LV-A9-D4-4693-F CIRCUIT BOARD WIRING	MAN WASSING WASSING	3300	FACTORY	Ş Q		44027
FAILURE HODE-OPEN (ELEC R LIGHT EXTINGUISHED, AN D, THE BROKEN CONNECTION	FAILURE HODE-OPEN (ELECT). THE GYRO-COPE PACKAGE WAS REJECTED DUKING SYSTEM TESTS WHEN THE YAW COURSE HEATER HONITO R LIGHT EXTINGUISHED. AMALYSIS ATTRIBUTED THE FAILURE TO A BROKEN CONNECTION AT THE DISPLACEMENT GROUP TEAHIML BOAR D. THE BROKEN CONNECTION WAS THE RESULT OF MICKING OF THE STRANDED CONNECTING WIRE.	TED DUKING SYSTEM TE SPOKEN COMMECTION AT FRANDED COMMECTING W	STS WHEN T THE DISPLINE.	HE YAN CACEMENT	32.00	HEATER MONITO TERNIMAL BOAR	
CORRECTIVE ACTION-ALL P	CORRECTIVE ACTION-ALL PRODUCTION BOLDERERS HAVE BEEN CERTIFIED BY A HASA-APPROVED SOLDERING SCHOOL SINCE THIS TERMI AL BOARD WAS ASSEMBLED.	TIED BY A MASA-APPRO	VED SOLDER	1 NG BCHO	3	MCE THIS TERMI	
AUTOFILOT-BRUAKE-A/B STRO PACRAGE	22H64-008/DA1003/L3-4MO-02-285 ROLL RATE GYRO SPIN NOTOR	COMPOST TE-FRO/DPL 27-72585-005	64 55 50 64 DERO	2	2 2		an Aganta, ang galang dina a ng gay sa
PATEUME MODE-FASE DUMIN	DURING OPERATION. THE SYRO SPIN NOTOR ROTATION DETECTOR INDICATED A MALFUNCTION PRIOR TO PUEL LOA	IATION DETECTOR INDI	CATED A MA	LFWET10	Ē	OR TO PUEL LOA	
STATEM EFFECT-OPERATION	STSTEM EFFECT-OPERATION ETGPS PREMATURELY. BOLL RATE SYRO SFIN HOTOR FAILED.	HIM MOTOR PAILED.					
VENICLE EFFECT-COMPOSITI	POBITE DELAYED.						

DIPFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

SYSTEM BUB-BYBTEM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	OTH VENDOR PART NO	
HAECTIVE ACTION-THE	COMMECTIVE ACTION-THE BYRO CANISTER MAS REPLACED.	-moografichiim/Bengelium/recoveringlicks. Article tradegureum/recoveringer			*****
AUTOFILOT-SQUARE-A/B GYRO PACRAGE	LV-90-04-4718F RATE 6YRO MOTOR	FAR 27-72585-5	2850 WTR 840220	YEA NO	100
FAILTRE MODE-OPEN, ELS RATE GYRO SPIN MOTOR AUSED BY EXCESSINE CUR	TRICAL. THE MAIN GYRO CANISTER IS FOUND TO HAVE PHASE B OPEN. DNT. THE REASON FOR THE EXCESS.	WAS REJECTED BECAUSE THE SHED INDICATED A GYRO NO-GO. THE ROL EXAMINATION OF THE WIRE IN PHASE B INDICATED THE FAILURE WAS CURRENT WAS NOT LEARNED.	E SHED INDICATED A IN PHASE B INDICA	GTRO NO-GO. THE ROL	
CORRECTIVE ACTIONS OF AUTOPILOT - SQUARE-A/B	10-44-07 3460 8/B/	FAR E7-43100-5	840218 FACTORY	3/85 GB/C	•
FAILURE MODE-FAIL DURI ERATIMG PROPERLY.	FAILURE MOE-FAIL DURING OPERATION. UNIT REJECTED FOR A NO-GO DURING NEXT ABBENGLY TESTING. THE TEST SET MAS NOT OP DAATING PROFERLY.	NO-60 DURING NEXT ABBI	DOLY TESTING. THE	TEST SET 148 NOT OF	
CORRECTIVE ACTION-NOME.	:. THE FAILURE MAS NOT CONFIRMED.				
AUTOFILOT - SAUARE- A/B GTRU PACKAGE	LV-19-04-4729F SHEG SUBASSEMBLY TWD	FAR 27-41386-5	640217 FACTORY	YES GD/C	
FAILURE MODE-OUT OF TOLI	TOLENAMER. THREE MODULES LEGE REJECTED FOR THPROPER OUTPUT MAVE-FORM.	IED FOR IMPROPER OUTPU	7 MAVE-FORM.		
AUTOFILOT-SQUARE-A/B GTHO PACKAGE	ETASE13 RATE GTRO	UTP-PET 27-04374-3	640217 GD/C	YES MINN. HONEYMEL HO L. JRS101A3	•003••
FAILURE MODE-OUT OF TO URE INCREASED, SPCED S	FAILURE MODE-OUT OF TOLERANCE. AT 160 DEGF THE 3PIN MOTOR MOULD NOT REACH SYNCHROWOUS SPEED OF 1600 PPS. AS TEMPERA TURE INCREASED: SPEED DECREASED. PRODABLE CAUSE OF FAILURE IS EXCESSIVE A-2 CEMENT BUILD-UP ABOUT THE SHRD MACHET.	SPIN MOTOR WOULD NOT REACH SYNCHROWOUS SPEED OF 1400 PPS. AS TEMPES OF FAILURE IS EXCESSIVE A-2 CEMENT BUILD-UP ABOUT THE SWID MASHET.	CHRONOUS SPEED OF A	GOO PPS. AS TEMPERA THE SHED MACHET.	
CORRECTIVE ACTION-WEND	ENDOR HAS IMITIATED SPECIAL HIGH TEMPERATURE TESTS ON ALL RENAIMING UNITS AT HIS PLANT (UNICH AR WHILE GTRO IS IN COMPLETED STATE, REF. FR-454-8-198.	PERATURE TESTS ON ALL !	EMAINING UNITE AT	HIS PLANT (MAICH AR	~~~~~ <u>~</u>
					•
				PAGE DESA	-

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

<u> </u>	STATEM BUS-BYDTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	11 NE 01F	# 5 4 0	VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	
<u> </u>	AUTOFILOT-SBUARE-A/B SYRO PACKASE	A-88-04-4700-F RATE EYRO SHED MACHET	FAE 87-04574-3	1227	FACTORY	2 3	YES HONEYMELL NO JRSIDIAR	0.1870
	PAILURE MODE-OUT OF TOLE S MAS ATTRIBUTED TO A PAR	TOLERANCE. THE RATE GYROSCOPE HAD LOW OUTPUT VOLTAGE FROM THE SPIN-NOTOR ROTATION-DETECTOR. THI A PARTIALLY DEMAGNETIZED MAGNET.	OUTPUT VOLTAGE FROM	THE BPIN-I	OTOR ROTA	9	-DETECTOR. THE	
	CORRECTIVE ACTION-A VERI	ACTION-A NERIES OF GYROSCOPE TEST PROCEDURE CHANGES NERE INITIATED TO CAUTION TEST EQUIPMENT OPERATORS A THAT CAN OCCUR TO SHED PICKOFF COLLS.	INCES NERE INITIATED	TO CAUTION	1 TEST 60	34	NT OPERATORS A	······································
·	AUTOPILUT-3QUANE-A/B	LV-99-04-4710F SHRD SUBASSCHRY ONE	FAR 27-43189-3	640218	FACTORY	ž Q	6 0/c	603176
	FAILURE MODE-OUT OF TOLE	TOLERANCE. THE MODULE WAS REJECTED BECAUSE THE NEXT ASSEMBLY COULD NOT BE CALIBRATED.	AUSE THE HEXT ASSEM	LY COULD !	OT BE CAL	.18RA	-tED-	
	CORRECTIVE ACTION-MONE.	CORRECTIVE ACTION-NOME. THE FAILURE MAS NOT CONFIRMED.						
	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-4712-F RATE 67RO	FAR 27-45045-805	640210	FACTORY	22		983457
	FAILURE HODE-OUT OF TOLE ZENER DIGDES CR1 AND CR BASE LEAD. RESISTOR R-3 H THE APPLICATION OF EXCES	FAILURE HODE-OUT OF TOLERANÇE, THE TWO RATE GYRO PACKAGE HAD HO PITCH OUTPUT AFTER A BROKEN COMMECTION WAS REPAIRED ZENER DIGOES CRI AND CRZ MERE INTERNALLY SHORTED. TRANSISTOR 62, THE PITCH ENITTER FOLLOHER, HAD AN OPEN INTERNAL BASE LEAD, RESISTOR R-3 HAD CHANGED FROM 475 CHMS TO GORD OHMS AND WAS BURNED. THESE DISCREPANCIES WERE ATTRIBUTED TO THE APPLICATION OF EXCESS VOLTAGE DURING TROUBLE SHOOTING.	IAD NO PITCH CUTPUT A STOR 62, THE PITCH ED HIS AND WAS BUTHED. 1	NESE DISCA	KEN COME CHER, HAE	ERE KERE	M WAS REPAIRED OPEN INTERNAL ATTRIBUTED TO	
	CORRECTIVE ACTION-NOME.							
	AUTOPILOT-SQUASE-A/S GTRO PACKAGE	A-BB-OA-4462-F BHRD CIRCUIT BOARD	FAR 27-43185-3	440207	FACTORY	¥ 6		:
	PAILURE MODE-OUT OF TOLE URES TO TEMPERATURE SENSI T SIGNAL TO Q-1 RESULTING GREATLY REDUCED TEMPERAT	PAILURE MODE-OUT OF TOLERANCE, TWO SHED MODULES MERE REJECTED WHEN THEY HAD NO OUTPUT, ANALYSIS ATTRIBUTED THE FAIL URES TO TEWERATURE SENSITIVITY, IT WAS FOUND THAT THE YOLTAGE DROP ACROSL CR-1 IN SUBASSENBLY 1 CAN REDUCE THE INPUT I SIGNAL TO 9-1 RESULTING IN A BORDERLINE GO-CONDITION, WHEN CR-1 IS SHORTED, THE SUBASSENBLY OPERATES PROPERLY WITH GREATLY REDUCED TEMPERATURE BENSITIVITY, INPUT DIODES CR-1 AND CR-2 PROVIDE A TEST INPUT WHICH IS NO LONGER USED.	TED WHEN THEY HAD ME AGE DROP ACROSE CR-1 IN CR-1 18 SHORTED, 1 AND CR-2 PROVIDE A	OUTPUT. A IN SUBASS THE SUBASSE TEST SWPUT	MALYSIS A EMBLY 3 C MBLY OPER	A R R A R A R A R A R A R A R A R A R A	BUTED THE FAIL EDUCE THE IMPU PROPERLY WITH LONGER USED.	un againg ann an ann an ann ann ann ann ann ann
	CORRECTIVE ACTION-AIR FO	CORRECTIVE ACTION-AIR FORCE DIBAPPROVED PROPOSED ECP 7838 TO REMOVE DIODES CR-1 AND CR-2 ON SUBASSEMBLY S.	TO REMOVE DIODES CR-	1 AND CR-1	ON BUBA	239	LY 1.	
							6980 2844	····

	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	WILOT STATEM-AIRBOR	¥			1
BYBYER BURNATER	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DAYE DIF TI	\$176 71ME DIF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	69AR694.1 SPIN HOTOR TRANSFORMER MOUNTING SC E7-41330-618 REW	UTP-PNT R7-41350-813	\$40203 60/C		YES 60/5 MO	
PAILURE HODE-STRUCTURAL ON POMER GROUP E7-41350-	PAILUNE MODE-STRUCTURAL-AT COMPLETION OF PRT (R/S) VIBRATION MOUNTING SCREMS FOI ON POMER GROUP E7-41330-613 OF 6TRO PACKAGE 89-41008. REFER TO FRR 164 AND 164A.	H HOUNTING BERENB FO	28 8FIN MOTOR	TRAMB!	SCREMS FOR SPIN NOTOR TRANSFORMER MERE LOOSE AND 1844.	
CORRECTIVE ACTION- POSS TES HETHOD FOR APPLICATION	POSSIBILITY LOCKTITE WAS HISSING FROM SCREWS, MANUFACTURING PROCESS SPECIFICATION 24.22.1 INDICAL ECATION OF LOCKTITE, SURWEY SS-85 ISSUED TO ENSURE SCREWS ARE ADEQUATELY SECURED.	RENS. MANUFACTURING TO ENAURE BEREVA ARE	PROCESS SPEC	HECURE	ON 24.22.1 INDICA	
AUTOPILOT-SQUANE-A/B 6780 PACKAGE	60AE654.1 ELAPSED TIME METER	UTP-MT	640E09 66/C		7 L4 30	•
FAILURE MODE-STRUCTURAL DRIVES INDICATOR MAS OPE	TURAL, AT COMPLETION OF PRT (R/S) VIBRATI S OPENED. REFER TO FRR 164 AND 164A.	PRT (R/S) VIBRATION, ELAPSED TINE WETER WAS DAMCED AND GEAR TRAIN WHICH 184 AND 164A.	ER WAS DAME	9	CEAR TRAIN WHICH	
CORRECTIVE ACTION-NO AC	MO ACTION REQUIRED, NOT A PLIGHT PROBLEM.					
AUTOFILOT-BAUARE-A/B FYRO PACKÁGE	LV-96-D4-4413F AMD ASSEMBLY RESISTOR	FAR E7-43229-3	640200 FAC	FACTORY	YES 60/C NO	:
FAILURE MOSE-OUT OF TOLERANCE-THREE ABSEMBLIES LIES PEAK FREQUENCY, 8/M 397 HAD AN INOPERATIVE IBUTED TO EXCESSIVELY TIGHT LIMITS ON THE VALUE IGHTLY LARGER THAN THE UPPER LIMIT, THE FAILURES THE SHED CIRCUIT,	FAILURE MINE-OUT OF TOLERANCE-THREE ABSCHALIEB MERE REJECTED, SAN 387 COULD NOT BE CALIBRATED. SAN 378 MAD WRONG FI LYER PEAR FREQUENCY, SAN 397 MAD AN INDPERATIVE FILTER, ALL FAILURES WERE COSTRMED, THE FAILURE OF SAN 367 MAS ATTR IBUTED TO EXCESSIVELY TIGHT LIMITS ON THE VALUE OF CALIBRATION BESINTON THE UNIT WOLLD CALIBRATE WITH A RESISTOR SA IGHTLY LARGER THAN THE UPPER LIMIT, THE FAILURES OF SAN 378 AND 387 WERE DUE TO THE TEM-ERATURE SENSITIVE NATURE OF	MERE REJECTED. 2/N 387 COULD NOT BE CALIBRATED. 2/N 378 HAD WRONG FI FILTER. ALL FAILURES WERE COFTRMED. THE FAILURE OF 2/N 367 MAS ATTR OF CALIBRATION RESISTOR. THE UNIT WOULD CALIBRATE WITH A RESISTOR 3. I OF 2/N 376 AND 387 WERE DUE TO THE TEMPERATURE BENSITIVE NATURE OF	BE CALIBRATHED. THE FALITHE TANGED CALLETTEN THE TEMEDIAL	ED. S/I LURE OF BRATE , URE SER	378 HAD WRONG FI S/N 367 MAS ATTR 17th A RESISTOR 9.	
CORRECTIVE ACTION-AN EC	CORRECTIVE ACTION-AN ECP TO CORRECT JARD PROBLEMS MAS REJECTED.	TEO.				
AUTOFILOT-SQUARE-A/B GTEO PACKAGE	LV-99-04-4713F 8+810 A38EMBLY	FAR E7-43EEB-3	6401E8 FAC	FACTORY Y	YES 60/C NO	•••••
FAILURE MODE-OUT OF TOLERANG E IN CHARMEL 5 WAS TEMPERATUR MALLY, THE FILTER P/N 27-0494 BUTED TO THESE DISCREPANCIES.	FAILURE HODE-OUT OF TOLERANCE, CHANNELE ONE AND FIVE HAD HO OUTPUT DURING FACTORY CHECKOUT, THE BHRD BUBASSEMBLY ON E in Channel 5 has temperature bensitive. The shad bubassembly tho in channel one has temperature sensitive, addition Mally, The Filter p/H 27-04948-B DIG HOT HEET THE PRESUENCY RESPONSE REQUIRENENTS, THE CHANNEL ONE FAILURE HAS ATTRE BUTED TO THESE DISCREMANIES.	OUTPUT DURING FACTO LY TWO IN CHANNEL ON RESPONSE REQUIREMENT	RY CHECKOUT. E MAS TEMPES S. THE CHAMP	THE BY AYUME S	RD BUBABBHBLY ON ENSITIVE, ADDITION FAILURE WAS ATTRE	and the state of t
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-MOME, AN ACP TO CORRECT SHAD PROBLEMS WAS REJECTED.	REJECTED.				
						.

GENERAL DYNAMICS CONVAIR DIVISION

13 JUN 1968

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

SYSTEM	TEST/REPORT NUMBER DIF DATA SOURCE	DIF DATA BOURCE	VEHICLE	\$17E	184		
BUB-BYBTEM	FAILED COMPONENT NAME	PART NUMBER	DATE DIF	110 3411	H O	VENDOR FART NO	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	COARGOS.1	UTP-PRT 69-45045-1	640127	y/ 9	ă ă		0
FAILURE MODE-OUT OF TOLERANCE, RESONUNCE BETWEEN 400 - 450 CPP R TO FRR 140.	LERANCE, DURING Z AXI - PRT (RZS) VIBRATION - TEMP, TEST SMRD FREG MAS HIGH DUE TO MECHANICAL. 450 cps causing 40% 14 between Pick off and spin motor thereby generating extra pulses. Refe	RATION - TEMP, TEST SMO FRES WAS HIGH OFF AND SPIN MOTOR THEREBY GENERATING	SMRD FREG THEREBY GE	14.8 ±1.04 NEAAT1146	EXT.	DUE TO MECHANICAL Extra Pulses. Refe	
CORRECTIVE ACTION-NOME.							
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	69AZ695.1 RATE STRO PLCKAGE	UTP-PRT 69-45045-1	640127	3/ 0 5	YES NO NO		699452
FAILURE MODE-OUT OF TG	FAILURE MODE-OUT OF TOLERANCE. DURING 2 AXIS PRT (R/S) VIBRATION-TEMPERATURE, YAW AND PITCH GYROG HAD EXCESSIVE TOT AL MALLS DURING VIBRATION. REFER TO FRR 140. CAUSED BY ANGULAR. VIBRATION CROSS TALK.	RATION-TEMPERATURE, RAR: VIBRATION CROSS	YAW AND PI	ITCH GYRC	A A	EXCESSIVE TOT	
CORRECTIVE ACTION-NOME.	٠						
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	LV-99-04-4677-F RATE GYRO	FAR 27-04574-3	640124	FACTORY	ž š	YES HONEYMELL NO JRSIDIAZ	894475
FAILURE MODE-OUT OF TOLERANSE. THE RATE E UNIT IN-PHASE MALL OUTPUT VOLTACE WAS I FIRM THE REPORTED FAILURE. HOWEVER, IT WAN TWO YEARS. THE CAUSE OF THIS SHIFT OF OF THE STROY, OR THE REALLT OF BONE MISHA	FAILURE MODE-OUT OF TOLERANGE, THE RATE GYROSCOPE WAS REJECTED IN RECEIVING INSPECTION WHEN, AFTER SURVEY 32-63, THE UNIT IN-PHASE MALL OUTPUT VOLTAGE WAS 14.73 HV WHENERS THE SPEC MAXIMUM ALLOMED IS 13.0 HV. ANALTSIS COULD NOT CONFIRM THE REPORTED FAILURE, HOMEVER, IT MAS FOUND THAT THE IN-PHASE MALL HAD INCREASED SLIGHTLY OVER 11 HV IN MORE THAN THO YEARS. THE CAUSE OF THIS SHIFT OF IN-PHASE MALL IS ATTRIBUTED TO PROBABLE STABILIZATION OF THE INTERNAL PARTS OF THE GYRO, OR THE REBULT OF SOME HISHANDLING.	GYROGCOPE WAS REJECTED IN RECEIVING INSPECTION WHEN, AFTER SURVEY 32-63, 14.75 MV WHEREAS THE SPEC MAXIMM ALLOWED IS 13.0 MV. AMALYSIS COULD NOT ON STOUND THAT THE IN-PHASE MULL HAD INCREASED SLIGHTLY OVER 11 MV IN MORE IN-PHASE MULL IS ATTRIBUTED TO PROBABLE STABILIZATION OF THE INTERNAL PAINDLING.	SPECTION I	MEN. AFI D NV. ANI IGHTLY OV ZATION OF	ER SULTS18	RVEY 32-63, TH COULD NOT CON WY IN WORE TH INTERNAL PARTS	
CORRECTIVE ACTION-NONE	CORRECTIVE ACTION-NOME, FAILURE NOT CONFIRMED.						
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	LV-99-04-4659F AATE GTROSCOPE	FAR 27-04574-3	\$40124	FACTORY	¥ 5	YES HOMEYMELL NO JRSIGIAE	692166
FAILURE MODE-OUT OF TOLERANCE.	LERANCE. HISH HYSTERESIS OF 9.28 MILLIVOLT. MAXIMUM ALLOMED IS 8.4.	LLIVOLT. HAXIMUM ALLO	CHED IS 6.	;			·
CORRECTIVE ACTION-NOME.							
						FAGE D297	7.7

	DIFFICULTIES REVIEW-AUTOFILOT STOTEM-AIRBORNE	OFILOT SYSTEM-AIRBO				-
878TEH 3U4-373TEH	TEST/REPORT HUNGER PAILED CONFORENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 71MC D1F	PRI VENDOR MANE OTH VENDOR PART ND	
AUTOFILOT-SQUARE-A/B STRO PACASE	-98-04-4439C DISPLACEMENT STROSCOPE	FAR 7-04280-3	73107	FACTORY Y	YES KEARFOIT NO CTO-2506-206	23910
FAILURE MODE-DRIFT, TWO 6YR	NO SYROSCOPES HAD HISH DRIFT. CAUSE NOT RHOMM. ASSEMBLIES NOT RECEIVED FOR AMALYSIS.	OT KNOMA. ASSEMBLIE	NOT RECE	VED FOR AN	1.7818.	
CORRECTIVE ACTION-MONE. AUTOFILOT-SQUARE-A/B GYRO PACKAGE	E. FAILURE NOT COPFIFIED. LY-98-04-4683-F SHED TRANSISTOR	FAR 27-43185-3	640123	FACTORY Y	7E8	**
FAILURE MODE-FAIL DURING OF DS THE GUIPUT BECAME ERRATIC ECTIVE.	FAILURE MODE-FAIL DURING OPERATION. THIS SAND ASSENDELY MOULD MORK MAEN VOLTAGE NAS FIRST APPLIED, AFTER A FEW SECON IS THE OUTPUT BECAME EDRATIC AND DROPPED OUT COMPLETELY. AMALYSIS ATTRIBUTED THE FAILURE TO BE (ENGSS) MAICH WAS DEP CTIVE.	JLD WORK IMEN VOLTAGI MALYBIB ATTRIBUTED TI	E FAILURE	7 APPLIED. 70 01 GNG	AFTER A FEW SECON 58) WHICH WAS DEP	
CORRECTIVE ACTION-NOME.	ů					
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	LV-99-04-4658F RATE STROGGOPE	FAR 27-04574-3	640123	FACTORY Y	YES HOMEYMELL HO JRS-101AE	4
FAILURE MODE-OUT OF TO	FAILURE MODE-OUT OF TOLERANCE. HIGH IN-PHASE NULL OUTPUT VOLTAGE.	WOLTAGE.				
CORRECTIVE ACTION-NOME.	ı					
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	69A2067 DISPLACEMENT 67RO	UTP-PET 7-04250-801	121079	2/03	YES KEARFOTT NO CTO 2504000	***************************************
FAILURE MODE-CONTAMINATION. AND ALSO IN POST TEMPERATUR TOLERANCE AT PLUS 5.21 DEG/P S CAUSED BY METAL BLIVERS AN	FAILURE MODE-CONTANIMATION. STICTION FAILURES AT -4 DEG F IN MS POSITION. PLUS 40 DEG F IN THE MJ AND MS POSITIONS. AND ALSO IN POST TEMPERATURE TEST IN THE MJ AND MS POSITIONS. THE FIXED RESTRAINT DRIFT FOR MS POSITION MAS OUT OF TOLERANCE AT PLUS 5.21 DEG/HR. OR A SHIFT FROM 1.5.P.T. OF 5.89 DEG/HR. WHERE TOLERANCE LINIT IS 3.0 DEG/HR. THIS MA S CAUSED BY METAL SLIVERS AND PARTICLES IN TAKE-OFF NOTOR AREA.	IN MS POSITION, PLU ONS. THE FIXED RESTR 5.89 DEG/HR, SHERE AREA.	S 40 DEG FAINT DRIFT	IN THE ME FOR NG POOLINIT IS 3.	ME AND MS POSITIONS, POSITION MAS OUT OF 13.0 DEG/HR. THIS MA	
CORRECTIVE ACTION-FREOM UBE N. EACH REPAIR GIRO WILL BE MAPECTION OF MILLIPORE FILTE MOT TO EXCEED 0.003 INCHES	D IN FLUSH SYSTEM AT COUNTED AS THREE AND RS AFTER FREON PLUSH.	VENDOR WILL BE CHANGED AFTER EACH NEW GYRO AS ONE, VENDOR CRITERIA STATED FOR CONTANIN 1-2-133.	EVERY 15 G BA IMPROVE ATION 18 1	YROS TO PRI D INSPECTION HAT PARTICE	EVERY 15 GYROS TO PREVENT CONTANINATIO OR IMPROVED INSPECTION WITH MORE TOW A MITION IS THAT PARTICLES ON FILIER ARE	
					0030 3644	

11 JUN 11866

GENER. JYNANICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME

	•••••		77104		106160				
PRI VENDOR NAME OTH VENDOR PART NO		IFICATIO PRICE T S STOCK.		ELSON FO		SISTOR.		A MALTI-STRANDE AM. DETAILED URI	
ACHDON P	TES 60/A HO	OF SPEC	7E3 66/C	ž Ž	V/93	PA TRANS T COMPONE CHANGE D CONCURS.	TES HONETHELL NO 27-04574-3	A MULTI	
	ř. Š	9 4	F 8	3	# £		<u> </u>	9 52	
VEHICLE BITE DATE DATE DIP	FACTORY	LTER WAS	FACTORY	유 휴 호	FACTORY	ENSITIVE * RELIABI ED THAT TI ENGINEER	FACTORY	ME STRAIG CATION PR S MERE EF	
VEHICLE DATE DIF	04107	MEL S FIS S S S S S S S S S S S S S S S S S S S	•110	1440 H4	1890	A HEAT SE	4110	USE MAS O	
DIF DATA BOUNCE PART NUMBER	FAR R7-48RR8-8	DT CALIBRATE, CHA GD/A PURGED PROM PASSING THE NEW &	FAR E7-43166-3	DAE TO A BROKEN	FAR E7-41643-603	BITIVE, CAUGED BY LY BE REDESIGNED VALUE ENGINEERING SPERKY BE RETAINED	FAR 87-04574-3	TLY TO GROUND, CA	
TEST/REPORT MUSER FAILED COMPOSENT NAME		E-OUT OF SPECIFICATION. SHED CIRCUIT BOARD MOLALD MOT CALIBRATE. CHAMBEL E FILTER MAS OUT OF SPECIFICATIO ACTION-PER RAR 3P-89-04-3742, DATED PERMARY 1964, 50/A PURGED PROH STOCK, ALL FILTERS PURCHASED PRIOR T DAANTHE RY-04848-5 BECAME EFFECTIVE, ONLY FILTERS PASSING THE NEW SPECIFICATION MERE RETURNED TO STOCK.	92	TRICAL CPEN. THE HODGLE HAD DISTORTED CUTPUT DUE TO A BROKEN LEAD SHAIDE THE HODGLE. THE REASON FO WAS NOT LEARNED.		OF TOLERANCE, APPLIFIED ASSEMBLY IS REAT SENSITIVE, CAUSED BY A MEAT SENSITIVE ENGESA TRANSISTOR. HAR A-90-04-3639 REGLESTED AUPLIFIER ASSEMBLY BE REDESIGNED USING MIGH RELIABILITY COMPONENTS AND APPROVAL TO PREPARE AN ECO WAS DENIED, VALUE ENGINERING HOSCATED THAT THIS CHANGE DES MONAMENTS. AND APPROVAL TO PREPARE AN ECO WAS DENIED. VALUE ENGINEERING HOSCATED THAT THIS CHANGE DES MONAMENTAL TRANSISTORS AND APPRIARY RECAINED. SYSTEM ENGINEERING CONCURS.		TORBUER WINDING SMORTED DIRECTLY TO GROUND. CAUSE WAS ONE STRAID OF CASE. CASE. INSTITUTED A PLANT WIDE SOLDERING TRAINING AND CENTIFICATION PROGREACE CHEEK LIRES AND INSPECTION PER BLUE PRINTS. CHANGES MERE EPPECT TO THIS BATE.	
FAILED C	LV-09-04-4870F SARG FILTER	IFICATION. 300D	LV-99-04-4637F semb subability	TRICAL OPEN, THE HODULI HAS NOT LEARNED.	LV-99-04-4644 Aum. IFTER: TRAMSTETOR	CANCE, AMPLIFIED OF SHEET TO S	A-88-04-4688F RATE 8YROSCOPE	T, ELECTRICAL, TORGUER WINDS THE STROSCOPE CASE, HOMEYWELL HAD INSTITUTED A STRUCTIONS REPLACED CHECK LE WAS MADE PRICE TO THIS DATE.	A right printed the same of th
AYBIEN ACE-BIBIEN	AUTOFILOT- SAUARE-A/B GTRO PACKASE	PAILURE MODE-OUT OF SPECIFICATION. SHED CIRCUIT BOARD MONALD NOT CALIBRATE. CHAMBEL E FILTER WAS OUT OF SPECIFICATIO H. CORFECTIVE ACTION-PER RAR SP-89-04-3742, DATED PERRUARY 1964; GD/A PURGED PROM STOCK, ALL FILTERS PURCHASED PRIOR TO MOTE-1 OF DRAWING RT-04848-5 BECAME EFFECTIVE, ONLY FILTERS PASSING THE NEW SPECIFICATION WERE RETURNED TO STOCK.	AUTOFILOT-SQUARE-A/B GYRO PACKASE	FAILURE HODE-ELECTRICAL R THE BROKEN LEAD WAS HOT	AUTOFILOT-SAMRE-A/B Grant PACKASE	FAILURE MODE-OUT OF YOLENAME, AMPLIPIED ABREMBLY IS MEAT SENSITIVE, CAUGED BY A MEAT SENSITIVE ENGESA TRANSISTOR. COMPECTIVE ACTION-RAR A-80-04-3839 REQUESTED AMPLIPIED ASSENCY BE REDESIGNED USING MICH RELIABILITY COMPONENTS AND CARCITYS. AN MEGAST FOR AMPROVAL TO PREPARE AN ECP WAS DERIVED. VALUE ENGINEERING INDICATED THAT THIS CHANGE DOES NOT CALLOR AND ATTORNAL OF SERVENT TRANSISTERS MADE BY SPEARY BE ENGINEERING CONCURS.		FAILURE MODE-SMORT, ELECTRICAL. TORBLER WINDING SMORTED DIRECTLY TO GROUND. CAUSE MAS ONE STRAND OF A MALTI-STRANDE DE WIRE SMORTING TO THE GYRONGOTE CASE. CORRECTIVE ACTION- HOMETWELL HAD INSTITUTED A PLANT WIDE SCLOERING TRAINS AND CERTIFICATION PROGRAM. DETAILED WRITTEN INSTRUCTION INSTRUCTIONS REPLACED CHÉCK LINTE AND INSPECTION PER BLUE PRINTS. CHANGES WERE EFFECTIVE AUGUST 1963.	

SEMERAL DYNAMICS CONVAIR BIVISION

15 JUN 1986

SIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

H34848	TEST/REPORT MANGER DIF	DIF DATA BOUNCE	WENTCLE	11.0	PRI VENDOR NAME	<u> </u>
AUTCHILOY-SQUARE-A/B	LY-88-64-4671F	FAR	•1107	FACTORY		
STRO PACKAGE AILURE MODE-FAIL DURING	MAD CIRCUIT BOARD E7-43E30-6 DARING OFERATION, SHED CIRCUIT BOARD WOLLD NOT CALIBRATE, CAUSE NOT RHOMM.	E7-43E3G-6 D MOT CALIBRATE. CA	UBE MOT RN	į	ì	
CORRECTIVE ACTION-HOME.						
AUTOFILOT-SQUARE-A/B GTRO PACRAGE	27-3214 BAHO PASS FILTER	UTP-PET 27-04948-3	44 0114	3/9	YES APPLIED COMPON NO ENTS ACISOR4	******
FAILURE HODE-STRUCTURAL.	UCTURAL, AFTER THERMAL BROCK AND DURING VIBUAL EXAMINATION, PARA, 4.9.2.2. UM), A BMALL CHACK MAS D SIDE OF THE CASE, CAUSE UNKNOWN,	UAL ETANINATION, PAI	. 4.9.E.		SMIL CHACK MS	
CORRECTIVE ACTION-THIS DISCRETA DISCREPANCY, REF. FR-454-2-134.	CORRECTIVE ACTION-THIS DISCREFANCY WAS CONSIDERED HINOR, AND TESTING CONTINUED. WENDOR WAS INFORMED OF THE REPORTED DISCREPANCY, REF. FR-654-2-134.	D TESTING CONTINUED	WENDOR I	AS INCOM	ED OF THE REPORT	a 1
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	LV-89-04-4463F RATE 61 ROSCOPE	FAR 27-04574-3	640113	FACTORY	YES JRS-101AP	***
FAILURE MODE-STRUCTURAL. TO MAYE OCCURRED AFTER TO MO FAILED DUE IMPROFER P	FAILURE MODE-STRUCTURAL, IN PASSE COMPONENT OF THE MULL QUIPUT VOLTAGE MAS PLUS 54.8 HILLIVOLTS, FAILURE MAS THOGHT TO HAVE OCCURRED AFTER TEMPERATURE SHOCK TEST. CAUSE WAS DETERHINED TO BE A BROKEN EPONT BOND ON THE PICKOPF. THE BOND FAILED DUE IMPROPER PREPARATION OF END CAP SURFACE.	PUT VOLTAGE NAS PLUI TERNÍNED TO BE A BRA	S S4.8 HIL KEN EPOKY	LIVOLTS. BOND CR	PAILURE NAS THOGOTHE THE PLEKOFF. THE	·
CORRECTIVE ACTION- A PUR.	CORRECTIVE ACTION- A PULL TEST EQUAL TO A LOAD OF 101 K GRAVITY MAS ADDED TO PICKOFF END CAP ASSEMBLY. A LIGHT SAND BLAST MAS ADDED TO THE CONTACT SURFACE OF DID CAP BEFORE CENEDITING TO INCREASE STRENGTH OF BOND.	VITY MAS ADDED TO P.	ICKOFF END FTRENGTH O	CAP A334	MLY. A LIGHT 3A	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-AB-04-4660F AHPLIFICA	FAR 27-41002-033	76£ 640110	FACTORY	YES 60/A NO	•
FAILURE MODE-OUT OF TOLE URING TESTING ANOTHER FAILING CENTING BETWEE 6 CONTACT.	OF TOLERANCE, TAW TORGUIN: RESPONSE TOO LOM, PROBABLE CAUSE OF PAILURE WAS AN APCHE MALFUNCTION. D THER FAILURE WAS FOUND, OUTPUT OF PITCH AMPLIFIED BECAME ERRATIC, RESISTOR R-S DID NOT HAVE CONDUCT F BETWEEN LEAD AND THE RESISTIVE ELEMENT. THIS ALLOWED NOVEMENT OF THE LEAD, INTERHITTENTLY BREAKIN	M. PROBABLE CAUSE OF LIFTER BECAME ERRATI NIB ALLOMED MOMEMEN	FAILURE IC. RESIST I OF THE L	CA N-S DI	CHE MALFUMCTION. D NOT MAYE COMDU RHITTENTLY BREAK.	0 = 2
CORRECTIVE ACTION-NO CORRAMITENT RESISTOR A SURVEY THROUGH -335 RESISTORS MAN NAME AND THE IN MARCH 1961.	CORRECTIVE ACTION-NO CORRECTIVE ACTION TREEM ON THE REPORTED PAILUNE OF YAM TORAUIMS RESPONSE TOO LOW. FOR THE INTE MITTENT RESISTOR A SURVEY INSTRUCTION ES-64 DATE!) FEBRUARY ES 1964 RESUIRED RENOVAL FROM STOCK OF ALL 86-75050-001 MADUSACTURE IN MARCH 1961.	D FAILURE OF VAN TON E4 1964 REBUIRED REI MCE BEFORE MARCH 194	TOUTHS RES	PONSE TO STABLISM	ALL 86-75050-00: D A NEW HETHOD OF	

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	VENDOR HANE VENDOR PART NO		TAM CHANNEL. A MESTRAN CEN	HINN. HOMETHEL L JAS-101AE		HD CAP ASSEMBL PULL TEST NOW WAS ADDED TO	YES HONEVELL.	MT OF SPECIFIE ECOMO/VOLT PL N WHICK ALLON & GTRO MAS D.	- 84 48 I TI VI TV		CR 87461M6. D	-
	# 5 # 0	÷ 8	8 1	= 9	LERAN MINAT	2 T 16 11 MG	ř č	MAL O REE/3 UCT10 R TH1	1	2 2	F0081	
	TIME DIF OTH	FACTORY	FIER. 65	3	LASE MALL LAT OF TO	THE PICK-	FACTORY	COUPUT 1.145 DEG 1.14 PECO MIPUT FO	ENED TON	FACTORY	RICH TO	
¥	VEHICLE DATE DIF	•010*•	07 38 THE ENG ARPLI	6 4010 9	IVERAGE PA	LODED TO TAKES LECKED CAP CAPE CAFE	1460	EN TORGUES REQUIRES O	WHICH WID	#30D	CCURRED !	
DIFFICUALIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	DIF DATA BOURCE PART HUMBER	FAR E7-72565-5	THE SERVO CAN WAS REJECTED FOR CARATIC CUITUT IN THE VERHIER CHE YAN CHAMMEL. TRANSISTOR 41 IN THE YAM SHITCHING AND BARMING AMPLIFIER. 45 MAS A MESTRAN CENTRAL STORM LETE PLAUTED FROM STOCK.	UTP-9ET ET-04574-8	E TEST PROOF CYCLE A. I OF CYCLE & DAMPING RATI HE PICK-OFF END CAP. AI	A LOAD OF 101 68 WAS / CIENT STREWSTH, ANY CR. ACT SURFACE OF THE DID OMD, FR 850-E-117A.	FAR 55-04120-1	ILED IN THE PACTORY WHI ON IN RECEIVING WHICH I DAYOLT) BUY OUT OF SPET GREE/BECOMDAYOLT, THE I	EASED 17 OCCEMBER 1965	COMPOSITE-FACTORY 27-41000-811	RHIER ROLL DEPLECTION (AMPLIFIER, IMEP FAILUM	
DIFFICUATIES REVIEW-A	TEATAGEORT MAMER FAILED CONFOMENT NAME	LV-88-04-4548F AWLIFIER-TRANSISTOR	FAILURE MODE-FAIL DURING OPERATION. THE SERVO CAN WAS REJECTED FOR ESRATIC CUTFUT IN THE VERNIER ONE TAN CHANNEL. T He pailure has caused by a defective translator of in the Yam shitching and bunning amplifier, of has a Mestran Crus Ese.	ETAIBAT-3 AID ETAZITS-3 RATE GYBO	FAILURE MOCE-OUT OF TOLERANCE, DURING POST 1000 HOUR LIFE TEST PROOF CYCLE A: AVERAGE PHASE MULL; LARGEST TOTAL MUL. LANGE OF TA AND TOMBUCE LINEARITY WERE OUT OF TOLERANCE. CAUSE OF PAILURE UAS A SPOKEN EPOST BOND AT THE PICK-OFF END CAP, AND THE PICK-OFF END CAP, AND THE PICK-OFF END STACK HAD SERVATED AT THE END-CAP.	WENDON TO 1) A PULL TEST ENUIVALENT TO A LOAD OF 101 68 WAS ADDED TO THE PICK-OFF END CAP ASSEMBLAY THE CENEXIED BOND WOULD BE OF SUFFICIENT STREMETH, ANY CRACKS RESULTING FROM THE PULL-TEST NOU ECTION, 2) LIGHT SANDBLAST OF THE CONTACT SURFACE OF THE END CAP GEFORE CEMENTING) WAS ADDED TO THIS MOULD INCIRASE STREMETH OF THE BOND, FR 850-E-117A.	LV-99-04-4527-F 67806COFL/RATE	FAILURE MODE-OUT OF SPECIFICATION. THE RATE GYROSCOPE FAILED IN THE FACTORY WHEN TORGUER OUTPUT WAS OUT OF SPECIFIC ATION. ANALYSIS REVEALED THAT THE GYRO MAS IN SPECIFICATION IN RECEIVING WHICH REQUIRES 0.143 DEFREE/SECOND/WOLT PLUS ON HIMUS OF PROSENT (GIVING A LOW OF 0.114 DEGREE/SECOND/WOLT) BUT OUT OF SPECIFICATION IN PRODUCTION WHICH ALLOWS A RAME OF PLUS OR HIMUS OF PRICENT FOR A LOW OF 0.132 DEGREE/SECOND/WOLT. THE MEASURED OUTPUT FOR THIS GYRO WAS D.1. AS DEGREE/SECOND/WOLT.	CORECTIVE ACTION—A NEW FINDUCTION SPECIFICATION WAS RELEASED 17 DECEMBER 1965 WHICH MIDENED TORBUING SAMBITIVITY T PRUS OR HINDS 13 PERCENT OF MONIMAL.	A6445-001-EFC-CO-01-0008-008	FAILURE MODE-ERRATIC OPERATION-AN UNEXPECTED 9 DESREE VERHIER ROLL DEFLECTION OCCURRED PRIOR TO BOOSTER STACING. DU E to a mock bensiffue transistor in the Verhier Roll DC amplifier. (REF Failure analysis report LV-as-d4-4387P).	
13 JUN 1866	37.57EH 248-27.57EH	AUTOFILOT-SSUARE-A/B STRO PACRACE	FAILURE MODE-FAIL DURING ME FAILURE MAS CAUSED BY ESE.		FAILURE MOCE-OUT OF TOLE LAND TOROUGH LINEARITY WAILURE WAS A SPOKEN EPORT EPARATED AT THE ENGLAPP.	CORRECTIVE ACTION-VEDBON Y TEST TO ENSURE THAY THE LD BE CAUSE FOR RELECTION THE FAB OPERATIONS. THIS N	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF SPEC ATION, AMALYSIS REWEALD & OH HIMMY SO PECENT (61 A RAME OF PLUS ON HIMUS SO DEGREE/SECOND/VOLY.	CORRECTIVE ACTION-A NEW O PLUS OR HINDS 13 PERCEN	AUTOFILOT - SQUARE-A/B GTRO PACAAGE	FAILURE MODE-ERRATIC OPE E TO A SMOCK BENSITIVE TR	

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	DIFFICULTIES REVIEWS	DIFFICULTIES REVIEW-AUGRICUL STRIKE-ATHRONIA			_
BUB-BYBTER	TEST/REPORT MUSES. PAILED COMPOSENT 'MME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	PRI VENDOR HANE OTH VENDOR PART NO	
NYBYEN EFFECT-ENNATIC OPE	ATIC OPERATION-STREEM WOULD BE SMOCK OR VIBRATION SENSITIVE.	VIBRATION SENSITIVE.			•• 7••
WENICLE EFFECT-COMPOSITE RESCHEDULED	RESCHEDULED.				
CORRECTIVE ACTION-THE BER	CORRECTIVE ACTION-THE SERVO ANDLIPTER PACKAGE MAS REPLACED.	ė			
AUTOFILOT-SQUARE-A/B STRO PACRAGE	LV-88-04-4888-F RATE GYRO BUADRILEVER	FAR E7-04574-3	640107 FACTORY	YES HIMM-HOME WELL NO JASIDIAS	***************************************
FAILURE MODE-OUT OF SPECI 319 IN THE ELECTRONICS ASS FAILURE ANALYSIS, ANALYSIS DID FING THE IN-PRASE COM- , TPIS EXCESSIVE MALL MAS	FAILURE MODE-OUT OF SPECIFICATION. THE RATE GYROSCOPE REPORTEDLY MAD EXCESSIVE PHASE SHIPT AT 180 DEGREES DURING TE 315 IN THE ELECTRONICS ASSEMBLY AREA. ALL CALIBRATION RESISTORS MERE REMOYED BEFORE THE GYROSCOPE WAS DELIVERED FOR FAILURE AMALYSIS. AMALYSIS WHITH RESISTORS OF PROPER YALUE COULD NOT CONTISM THE REPORTED FAILURE. MOMEVER, AMALYSIS DID FIND THE IN-PHASE CONFORMY OF THE GYROSCOPE MALL TO BE OMER 150 NV MHEREAS THE SPECIFICATION ALLOMBELE IS 3.3 NV. TYS ENCESSIVE MALL MAS CAUSED BY A DISTORTED BUMDRILEVER.	PORTEDLY HAD EXCESSIVE SISTORS WERE REMOVED BE COLLD HOT CONTIRH THE ECOMEN ISO MY MHEREAL ER.	PHASE SHIFT AT 180 FORE THE STROSCOPE NEPORTED FAILURE. THE SPECIFICATION	DEGREES DURING TE MAS DELIVERED FOR HOMEVER, ANALYSIS ALLOMBLE IS 3.3 WY	
CORRECTIVE ACTION-A REVIEW OF BISALLONED.	IN OF STROSCOPE HANDLING METHODS WAS PERFORMED AND CHANGES OF THE TRIMMING RESISTORS IS NOW	IMA PERFORMED AND OW	HGES OF THE TRIMMIN	6 RESISTORS 18 NOM	
AUTOFILOT-SCIENE-A/B 67RO PACKAGE	LV-89-D4-4854F SPED SUBARSECHIA S	FAR 87-43189-3	SADIDA FACTORY	YES GD/A ND	:
FAILURE MENE-OUT OF SPECI ME, THEY HAD NO OUTPUT AT D LEVEL SHOD FAILS CAN BE AND FUNCTION CORRECTY IN LTAGE DROP ACROSS DIODE CR CR-1 SHORTED THE UNIT OPER ROPERLY WITH A STROMEOFE R MEE.	FAILURE MEDE-OUT OF SPECIFICATION, SEVEN SHED SLGASSPHELIES GAVE NO-GO INDICATIONS DURING NEXT ASSENDLY LEVEL TESTING, THEY HAD NO COLING A TEMPERATURE A FEW DEGREES BELOW AND ESCHIFIC CAUSE OF FAILURES NOT KNOWN, NOS BOLLOW LEVEL SPECIFIC CAUSE OF FAILURES NOT KNOWN, NOS BOLLOW LEVEL SHOP SIZES ASSENDLY CAN FAIL IN OWE NEXT ASSENDLY AND FLACE TON CARREST IN ANOTHER OFF TO TOLINAME BUILD UP. E. SUB ASSENDLY—OWE IS TEMPERATURE SENSITIVE, S. THE WOLLD CAPACITON CARREST THE MOTHER OFF SENSITIVE, S. THE WOLLD SHOP ACCOUNTY AND TEMPERATURE SENSITIVE, S. SUBSENDLY—OWE IS TEMPERATURE SENSITIVE, S. THE WOLLD THE WOLLD SHOP SENSITIVE SHOP SENSITIVE SHOP SENSITIVE SHOP SENSITIVE SHOP SENSITIVE SHOP SENSITIVE AND SENSITIVE SHOP SENSITIVE ASSENCES AND SENSITIVE WIDENED RESISTOR AND THE WITH A SHIBHILY WIDENED RESISTOR AND SENSITIVE AND PUNCTION PROPERLY WITH A SHIBHILY WIDENED RESISTOR AND SENSITIVE AND SENSITIVE AND PUNCTION PROPERLY WITH A SHIBHILY WIDENED RESISTOR AND SENSITIVE WIDENED RESISTOR AND SENSITIVE AN	IES GAVE NO-GO INDICATOR AMBIENT. SPECIFIC CAUSED BY-1, A SUE ANDROLY-ON RANSISTOR Q-1 SUFFICII ENSITYITY IS GREATLY BET BIGHAL IS USED. IT AND FUNCTION PROPERS	TOWS DURING NEXT AS AUSE OF FAILURES NO SEGUE CAN FAIL IN E. 13 TEMPRATURE SE NILY TO CAUSE A SOW REDUCED. 4. SOME SU MANY SHED CIRCUIT A MANY SHED CIRCUIT A MITH A SLIGHTLY W	SENGLY LEYEL TEST! ONE NEXT ASSENS. NOSTINE. 3. THE WO USER LINE 60. NITH BASSENSLES WERE F. SALLE NOT CALTARA ILDENED RESISTION RA	
CORECTIVE ACTION-SAS LV- E FROM SASASEMBLY-CAE, AN	CORECTIVE ACTION-RAS LV-\$0-04-3826 LED TO INITIATION OF MAP MOSIDED AND ECP 7838 WHICH REMOVED DICOES CR-1 AND CR- FROM SUBARRECHELY-CHE, AND WHICH WIDENED THE CALIBRATION PANKE. AIR FORCE CANCELLED THERE CHANGES ON MARCH 1D. 1864	MAP MOSIDED AND ECP : BANGE, AIR FORCE CAM	638 WHICH REMOVED !	3 COES CR-1 AMP CR-1 ON MARCH 10. 1964	
AUTOFILOT-BEUARE-A/B GYRG PACEASE	LV-98-04-4606F BARID BIBABBERBLY CHE	FAR R7-45168-5	840100 FACTORY	YES 46/C NO	
FAILURE MODE-OUT OF TOLERANCE, 16 EVEALED THE MODULE IS TEMPERATURE O PRODUCE BOSDER-LIME MALFUNCTION	FAILURE MODE-OUT OF TOLERANCE, 16 MODULES GAVE INCORRECT NO GO INDICATIONS DURING MEXT ASSENDLY TESTING. AMALYSIS EVEALED THE MODULE IS TEMPERATURE BEMSITIVE BY MATURE AND DIODE CRI CAN CAUSE REDUCTION IN INPUT SIGNAL SUFFICIENT O PRODUCE BORDER-LINE MALFUNCTION.	NO 60 INDICATIONS DU DIODE CRI CAN CAUSE I	ING MEXT ASSESSEY EDUCTION IN INPUT	ESTING. AMETSIS R	
				PAGE 030E	

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	****	DIFFICULTIES REVIEW-AUTOPILOT STRIEN-AIRBORNE	HOPILOT SYSTEM-AIRBOR	¥		Ì		-
	STSTEN BUB-STSTEN	TESTARPORT NUMBER FAILED COMPONENT NAME.	DIF DATA SOUNCE PART NUMBER	WENICLE DATE DIF	817E TIME DIF	# 0 1 X	VEHICLE BITE PRI VENDOR MANE DATE DIF TINE DIF OTH VENDOR PART NO	
	CORRECTIVE ACTION-AN ECP	IN ECP TO CORRECT THEME PROBLEMS WAS NEJECTED.	JECTED.		,			****
··········	AUTOPILOT-SQUARE-A/B GTRO PACKASE	1.15037.1 1.15037.1	UTP-PRT SD-43048-1	211530	J/03	2 2		*
	FAILURE MODE-OUT OF TOLE TO FRR 101.	TOLGNANCE. DURING PRT LCM TEMP (EG P) TEST SARD PICK-OFF DENACACTIZED CAUSING LCM SIGNAL. REPER	TEST SAND PICK-OFF D	CIA CACTIZE	D CAUBING	3	Blown. REPER	
	CORRECTIVE ACTION-NOME.							
	AUTOPILOT-SQUARE-A/B GTRO PACKACE	6947895.1 RATE GYBO PACKAGE	UTP-PRT 00-45045-5	631230	3/09	, K		9
	FAILURE MORE-FAILURE DUR ING CIRCUIT, AND LATER CO AND RI ON ENITTER BOARD (FAILURE MOE-FAILURE DURING OPERATION. DURING PRT LOW TEMPERATURE (EDF) TEST, INTERHITTANT TEMP-SAFE NO-GO (HONITOR INS CIRCUIT, AND LATER CONTINUOUS NO-GO, CAUSED BY EXCESSIVE SOLDER ON TERMINALS CAUSING SHORT BETWEEN TERMINALS 18 AND RS ON EMITTER BOARD (TB-1) ALSO, REPUR TO FRR 101.	PERATURE (EGF) TEST, VE SOLDER ON TERNIMAL	INTERNITTA S CAUSING	MT TEMP-S	F 1	FERNINALS 18	
	CORRECTIVE ACTION-ELECTN REMORK MERE INSPECTED.	CORRECTIVE ACTION-ELECTHONICS AREA ALERTED TO POTENTIAL SOLDERING PROBLEM AND CANISTERS CONING SACK FROM FIELD FOR ENORK WERE INSPECTED.	OLDERING PROBLEM AND	CANI STERD	CONTING BA	. g	ion fittab For	
	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	LV-99-04-4856F SIGHAL AMPLIFIER-TRANSFORMER	FAR E7-41676-607	£250 €31£19	FACTORY	ů ç	6 D/A	******
	FAILURE MODE-STRUCTURAL- OUND IN THE SIGHAL AMPLIF AND TIME OF VOLINGE APPL	FAILURE HODE-STRUCTURAL, TRANSFORMER CRACKED OPEN, IT WAS FOUND ALBO TO BE BURNED. EXTENSIVE CONFOMENT DANAGE NAS F XAMO IN THE SIGNAL AMPLIFIER. IT APPEARED TO HAVE BEEN CAUBED BY AN EXTERNALLY APPLIED VOLTAGE. THE SOURCE, LOCATION AND TIME OF VOLIAGE APPLICATION CAMMOT BE DETERMINED.	I FOUND ALSO TO BE BUR RED BY AN EXTERNALLY	MED. EXTEN APPLIED VO	ATAGE. TO	2 ×	T DAMAGE 1463 F JACE, LOCATION	
	CORRECTIVE ACTION-MOME.					1		
	AUTOFILOT-BRURE-A/B GYBO PACKAGE	LV-88-C4-4653F Bisplacement fyro	FAR 7-04850-805	631210	FACT DRY	20	YES KEARFOTT NG CYGESGGGG	
	FAILUME MODE-BTRUCTURAL.	TURAL. EKCESSIVE FIKED RESTRAINT DRIFT OF S.S CEGREES. MAXIMUM ALLOMBLE IS 3.0 DEGREES TED FLEXLEAR WHICH MAS CAUSED BY PLOM OF BENI-LIBUID PLOTATION PIUID FAST THE PLEKLEAD.	CF 3.8 EEGREES. MAXIMUM ALLOMMBLE IS 3.0 DEGREES PER HOUR. IF BENI-LIBUID PLOTATION PLUID PAST THE PLEKIEAD.	NH ALLOMB	A87 THE P	33	LAD.	
	CORRECTIVE ACTION- REARF	KEARFOIT REPORT 4-116 RECEIVED IN JANUARY 1984 BTATEB THAT THE PRESENT GUANTITY OF GYROSCOPES RE) PLEX LEADS IS VERY GMALL: TO ELIMINATE THE REMAINING PEW PAILUNES MOULD PROBABLY REGUIRE A RADI	TANT SOUTH THAT THE THE PIET OF THE PIET O	THE PRESENTATION	N BULNTE	8	STROSCOPES RE	····

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GENERAL DYNAMICS CONVAIR DIVISION

15 JUN 1866

	DIFFICULTIES REVIEW-AUTOFILOT STRIEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥			ſ	
名であれたM 単し第一条であり戻れ	TESTAREPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOURCE PART HUMBER	VEHICLE DATE DIF	71ME 01F	PRI VENDOR MANE OTH VENDOR PART NO	¥ ~	
CAL CHANGE SUCH AS A NEW !	MEN DAMFING FLUID.					Ì	201140
AUTOFILOT-SQUARE-A/B	LV-99-04-4674-F 34m0	FAR R7-48188-8	431214	FACTORY Y	TE\$ 60/C		401307
FAILURE MODE-FAIL DURING SPERATION. SHED SU	FAILUME HODE-FAIL DURING BYCRATION. SHAD SUBASSEMBLY & HAD NO-GO CONDITION AT 1633 CPB. FAILURE NOT CONFIRMED BUT P ILUME ANALYSIS LIMITED TO SUBASSEMBLY ONLY.	NO-60 CONDITION 4T	1633 CP6. F	ASLURE NO	T CONTINED B	5	
CORRECTIVE ACTION-NO CORRECTIVE ACTI	CORRECTIVE ACTION-NO CORRECTIVE ACTION TAKEN AS 17 MAS NOT CONFIRMED BY LIMITED FAILURE ANALYSIS AND NO CAUSE FOR E FAILURE INDICATION COULD BE FOUND.	CONFIRMED BY LIMITED	PAILURE A	MALYBES A	ND NO CAUSE PA	۰ ۶	
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	LV-90-D4-4873F 348D	FAR 27-43188-3	C31217 F	FACTORY Y	YES 60/A NO	•	****
FAILURE HODE-OUT OF TOLES	TOLERANCE, SHEID HAID A LOM OUTPUT ON NEXT ASSEMBLY TEST. CAUSE NOT RHOMM-	F ASSEMBLY TEST. CA	URE NOT KNO	i			
CORRECTIVE ACTION-NOME.							
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	LV-98-04-4651F BMRD CIRCUIT BOARD	FAR E7-4100E-9E1	1990 E	ETA Y	YES 60/A	. •	
FAILURE HODE-OUT C' TOLES ILURE, A DISCREPANT COMME	TOLERANCE, AN INTERNITTENT BARD NO-60 WAS RECEIVED. ANALYSIS TESTING COLLD NOT DUPLICATE THE FA COMMECTICA WAS POLAD DURING DISASSEDBLY. THIS COLLD HAVE CAUSED THE FAILURE.	IS RECEIMED. AMALYS THIS COLAD HAVE CAN	IS TESTING	COULD NOT	DUPLICATE THE	<u>.</u>	
CORRECTIVE ACTION- MANUFA	MMFACTURINS AND INSPECTION PERSONNEL WINSPECTION WAS STRESSED.	MERE BHOMM THE DISCREPANT CONNECTION. THE IMPORTANCE OF	PANT COME	CTION. TH	E BIPORTANCE O	U	
AUTOFILOT-SQUARE-A/B GVRO PACKAGE	LV-99-D4-1416F samd bleabedgly Oak	FAR R7-43146-8	431216 F	PACTORY Y	7ES 60/C	•	1000
FAILURE MODE-ELECTRICAL C	CAL OPEN. THE HODULE HAD HO OUTPUT DUE TO A BROKEN HELD.	NO A BROKEN MELD.	•				
CORRECTIVE ACTION-EPPECTI	CORRECTIVE ACTION-EPPECTIVE 18 MARCH 1864, WELD STATIONS ARE CERTIPIED HOURLY AND STACK WELDING 18 ELIMINATED.	CERTIFIED HOURLY	NO STACK W	ELD 1946 18	CLINIM TED.		
	Affection and the special contribution of the special cont	وعليات والمراورة والمتناولة والمراولة والمراولة والمراولة والمراولة والمراولة والمراولة والمراولة والمراولة			PA6E 0304	304	

15 JUN 1940

GENERAL DYNAMICS CONVAIR DIVISION

	DIFFICULTIES BEVIEW-AUTOFILOT SYSTEM-AIRBORME	PILOT SYSTEM-AIRBOR	¥				
SYSTEM SUS-SYSTEM	TEST/SEPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART MUNGER	VEHICLE BI	817E PRI TIME DIF OTH	PRE VENDOR NAME OTH VENDOR PART NO	MARK 1887 BO	
AUTOFILOT- HAUARE-A/B GYRO PACKAGE	LV-88-04-4687-F SHID MIRING	FAR 27-43100-3	SSIELS FACTORY		7E8 60/C NO		****
FAILURE MODE-OPEN (ELECT MERE THE INPUT LEAD ATTAC	FAILURE MODE-OPEN (ELECT). THIS SPIN HOTOR ROTATION-DETECTOR SUBASSEMBLY HAG NO OUTPUT DUE TO A BROKEN MELD JOINT M Mene the input lead attaches to the nickel meld risson.	A SUBASSEMBLY HAD M	0 OUTPUT BUE T	A 0	KEN WELD J	7 7 7	
CORRECTIVE ACTION-60/C	ELININATED STACK NELDING AND PERFORMED AN MOURLY CERTIFICATION OF WELD STATIONS	ED AN HOURLY CERTIF	ICATION OF WELL	STATI	CMS.		
AUTOFILOT-SQUARE-A/B GTRO PACHAGE	LV-99-04-4553-F SHRO BUBASSEMBLY 1	FAR 27-43105-3	GRIESS FACTORY	MY YES			013570
FAILURE MODE-OPEN IELECT Y GIVING A NO-GO INDICATI MODULE:	FAILURE MODE-OPEN (ELECTRICAL). THE SPIN-MOTOR ROTATION DETECTOR(SMED) SUBESSÉNBLY I (S/M SEA) FAILED AT THE FACTON Y GIVING A MO-GO INDICATION THE PAILURE WAS ATTRIBUTED TO A BROKEN WELD WHICH RESULTED IN AN ELECTRICAL OPEN IN THE MODULE.	ECTOR (BURD) BLD ASSET BROKEN WELD WHICH R	BLDESSENBLY I (9/N SE4) FAILED AT THE FACTOR WHICH RESULTED IN AN ELECTRICAL OPEN IN THE	D FAIL	ED AT THE L	FACTOR N THE	
COTRECTIVE ACTION- 1. A HOLDING THE 40-MATT SECOND FOMER SUPPLY ATION OF WELD STATIONS. 5. STACK	FIXTURE FOR FOR NELDING NELDING WAS	TESTING IN-LINE WELDS WAS MADE. E. HEW POTTING TIMED COFFER TO NICKEL RIBBON WAS DELETED. 4. ELINIMATED.	NEW POTTING H	WELDS AR THERE 13	ARE BRING USEN. 3. 19 HOUSEY CENTIFIC	36.0. 3. CENTIFIC	
AUTOPILOT-SQUARE-A/B	LV-99-04-4553-F SARD BUBASSEMBLY 1	FAR 87-43189-5	CSIRIG FACTORY	T O			*******
FAILURE MODE-OPCH (ELECT ORY 61YING A NO-GO INDICA ME MODULE.	FAILURE MODE-OPCH (ELECTRICAL), THE SPIN-MOTOR ROTATION-DETECTOR (SMBD) SUBASSENBLY 1 (3/N 3153) FAILED AT THE FACT ORY GIVING A NO-GO INDICATION. THE FAILURE WAS ATTRIBUTED TO A DROKEN WELD MHICH RESULTED IN AN ELECTRICAL OPEN IN T ME MODULE.	ECTOR (SHRD) SUBASSA A BROKTN WELD WHICH	JALY 1 (5/H 3) RESULTED IN A	53) 74 # ELEC	ILED AT THE IRICAL OPEN	E FACT	
CORRECTIVE ACTION-1, A MOLDING THE 40-MATT-RECOND POMER SUPPLY TION OF MELD STATIONS, S. STACK	FIXTURE FOR FOR MELDING MELDING MAS	TESTING IN-LINE MELDS WAS MADE. E. I TINNED COPPER TO NICKEL RIBBON WAS I ELINIMATED.	NEW POTTING MON DELETED. 4. TH	MOLDS ARE BEING THERE IS HOURLY		USED. 3. CERTIFICA	
AUTOFILOT-SQUARE-A/B SYRO PACKAGE	LV-88-64-4553F BARD BLBA63EFBLY 1	FAR E7-43105-8	SSEEL FACTORY	A VE			
FAILURE MODE-JPEN GLECTR STYING A P/GO INDICATIO MODULE.	CTRICAL). THE BPIN-MOTOR ROTATION DETECTOR(SHRD) BUBASSEMBLY 1 (S/NG156) PAILED AT THE FACTORY 110M. THE FAILURE MAS ATTRIBUTED TO A BROKEN MELD WHICH RESULTED IN AN ELECTRICAL OPEN IN THE	CTOR (SHED) BUBASSEM RECKEN WELD MATCH RE	1LY 1 (3/NS156)	PATLE	S AT THE PL	ACTORY R THE	
CORRECTIVE ACTION-1.A MO	HOLDING PIXTURE FOR TESTING IN-LINE MELDS WAS MADE. 2. NEW POTTING HOLDS ARE BEING USED. 3.	CLOS WAS MADE. E. M	W POTTIM HOLD	* ARK	DE1144 UBED		
	-				974	PA6E 0305	

GENERAL DYNAMICS CONVAIR DIVISION

18 JUN 1866

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9901 WAT 81	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	FLOT SYSTEM-AIRSORP	.			,
3731EH 9/6-3731EH	TEST/REPORT HUMBER PAILED COMPOMENT NAME	DIF DATE SOURCE PART NUMBER	VEHICLE BI	TIME DIF OTH	PRI VENDOR NAME OTH VENDOR PART NO	
HE 40-MATT SECOND POMER B.	SUPPLY FOR MELDING TIMED COPPER TO P	TIMMED COPPER TO MICHEL RIBBON WIR DELETED. 4, THERE IS HOURLY CERTIFICATS ELIMINATED.	LETED. 4.THER		URLY CERTIFICATS	****
AUTOPILOT-SQUARE-A/B GTRO PACRAGE	A-99-04-4802C STRO DISPLACEMENT	FAR 7-04250-3	SSIESO PACTORY		YES KEARFOTT NO C70-E306-DGO	*****
FAILURE MODE-DRIFT, TWO	TWO GYROS WERE REJECTED FOR HIGH DRIFT. THE GYROS WERE NOT SUBMITTED FOR FAILURE AMALTSIS. ME. NO AMALTSIS WAS PERFORMED.	THE STROS NERE NOT	SUBMITTED FOR	PAILGE	E AMALYSIB.	
	69AZ684.1 AMPLIFIER-TRANSIBTOR 4-1 -ENDSS-	UTP-PAT	SSIEDS PACTORY	NO YES	GENERAL ELECTR	1
FAILURE MODE-OPEN-ELECTRICAL-D TO 0.500 WOLTS DUE TO A FAULTY NUMBER FRR-ORE (69-41002-613).	ELECYRICAL-DURING INITIAL PROOF CYCLE YAW RATE EMITTER-FOLLONER OUTPUT DECREASED FROM D.682 VOLTS 70 a faulit 4-1 transister. A Bad spot meld caused the lead to break loose. Refer to failure los -41002-613).	RATE EMITTER-POLLON TLD CAUNED THE LEAD	ER OUTPUT BEC TO BREAK LOOS	. RGTE	NOM D. BSE VOLTS	
CORRECTIVE ACTION-VENDOR	CORRECTIVE ACTION-VENDOR MAS NOTIFIED OF FAILURE.					-
AUTOFILOT-SQUARE-A/B 67RO FACKAGE	LV-69-C4-4533-? ROLL DISPLACEMENT GYNO SPIN NOTOR	FAR 7-04230-803	EGED FACTORY 631E09	ORY TES	KEARFOTT	991300
FAILURE MODE-FAIL DURING SCONERED THAT THE SPIN HO OR BEARING HAD LOST HOST OSCOPE HAS INACTIVE WITH	FAILURE MODE-FAIL DURING CHERATION. DURING ANALYBIB OF THE GYROBCOME FAILURE, DUE TO A SHORTED FLEX LEAD, 17 MAS DI SCONERED THAT THE SPIN MOTOR WAS MAING A GRINDING BOUND AT TWO POINTS IN THE MOTOR RUNNE. ANALYBIB REVEALED THE HOT OR BEARING HAD LOST MOSI OF THE BEARINGS WHILE THE GYROBCOME HAS IMMETIVE WITH THE PHABE-A OPEN CIRCUIT.	SYROGCOPE FAILURE, DING POINTS IN THE MC RESULTED FROM OVERH	UE TO A SHORT STOR RUNUP. AN EATING OF THE	ED FLEX ALYSIS BEARIN	LEAD, 17 WAS DI REVEALED THE HOT LS WHILE THE 678	
CORRECTIVE ACTION-WOME.	THE EXACT CAUSE OF THE SPIN MOTOR FI	SPIN MOTOR FAILURE IS UNKNOWN.	·			
AUTOFILOT-SQUARE-A/B GYRO FACKAGE	LV-89-04-4333-F 67R06COFE/ROLL DISPLACEMENT	FAR 7-04250-803	296D FACTORY		YES KEANFOTT NO	may an after transport difference of the second
FAILURE MODE-BHORT (ELEC (SMED) GUTPUT, THE FAILU HAVE REBULTED IN OVERHEA	(ELECTRICAL). THE AUTOPILOT 67R08COPE PACKAGE PAILED WHEN IT HAD NO BPIN-MOTOR ROTATION-DETECTOR PAILURE RESULTED WHON SPIN-MOTOR ROTATION-DETECTOR PAILURE RESULTED WHON SPIN-MOTOR BEARINGS.	RAGE FAILED WHEN IT TO SHORT CIRCUITED A	HAD NO SPIN- HD BROKE, THE OR BEARINGS.	HOTOR R	OTATION-DETECTOR	-
CONNECTIVE ACTION-DAPPLE AD DISTONTIONS WHICH HAD	CORRECTIVE ACTION-DAFFLES WERE INCORPORATED IN THE P/N -803 AND -801 GYROSCOPES TO ELIMINATE FAILURES DUE TO FLEXLE AD DESTORTIONS MAICH HAD PREVIOUSLY BEEN COMMON. ALTHOUGH THIS MAS A P/N-803 STROSCOPE, THE OCCUMENCE OF THIS FAILUR	AMD -801 GYROSCOPEI IS MAS A P/N-803 GYR	TO ELIMINATE	FA1LUR CCURENC	ES DUE TO PLEXLE E OF THIS PAILUR	

SEMERAL DIMANICS CONVAIR DIVISION

19 JUN 1986

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	101144	*****		••33•3		**114		*****		
VEHICLE BITE PRI VENDOR NAME DATE DIP TIME DIP OTH VENDOR PART NO	THE NATURE OF	7E3 63-6			ILURE WAS CAUS		CAUSE WAS A M CMERED TRANSIS E THE INPUT DI		STEADY DC OUTP	PASE 0307
# 5 F 5	8	1		2 5	ž	4 5 5	IS DC. ITLY D.	2 0	4 9 <u>f</u>	
11 0 11 T	HODE BECA	FACTORY		FACTORY	ž 3	FACTORY	F 25 VOL.1 THE SLIGH TATED TO	PACTORY	EST SHOW!	
VEHICLE DATE DI	FAILURE	631206		\$021E9	W 408eUI	631205	DROP AND MERE INIT ALS.	P02150	SRATION T	
DIF DATA BOURCE	TEL: ELIMINATE THIS	7AR 27-42185-2		FAR E7-45045-805	JECTED POR HIGH PLTC BOARD.	FAR 87-45185-6	FUNCTION WITH A BIA SE IN DIODE VOLTAGE D31020 AND ECP 7838 VCELLED THESE PROPOS	FAR 87-41445-8	ED DURING FACTORY VI IE MAB. A BHORT CIRCU LUE IB UNKNOMI.	
TEST/REPORT NUMBER PAILED COMPOMENT NAME	E HODE HAS BEEN GREATLY REDUCED. IT IS IMPOSSIBLE TO COMPLETEL! ELIMINATE THIS FAILURE HODE BECAUSE OF THE NATURE ORGANITY OF THE MATERIALS USED.	LV-99-04-4817-F SHEO SUBASSEMBLY ONE	OLERANCE. THE MODULE BAVE A NO-60.	A-A9-04-4603F RATE GTRO	FAILURE MODE-OUT OF TOLERANCE, THE TWO RATE PACKAGE WAS REJECTED FOR HIGH PITCH TORBUING GAIN. THE FAILURE MAS CAUSED BY A LOSSE COMMECTION AT PIN 14 ON THE ENITTER FOLLOMER BOARD. CORRECTIVE ACTION-NOME.	LV-99-04-4864F S4RD FLIP FLOP	FAILURE MOE-OUT OF TOLERANCE, SWED SUB ASSEMBLY MOULD NOT FUNCTION WITH A BIAS LEVEL OF 23 VOLTS DC. CAUSE WAS A MASSIMAL COMBITION IN THE SUBASSEMBLY LOWERED TRANSIS TOR GAIN AT LOWER TEMPERATURE WILL CUT OFF THE FLIP-FLOP. CORRECTIVE ACTION- IN REQUEST TO RAR LY-99-04-3828 A MAP HOSIDZO AND ECP 7838 MERE INITIATED TO REMOVE THE IMPUT DISCRECTIVE ACTION- THE SUBASSEMBLY. AIR FORCE CHANGE BOARD CANCELED THESE PROPOSALS.	SLV-99-04-4561-F CIRCUIT BOARD TRAMBIBTOR 6-8	FAILURE MODE-SHORT (ELECTRICAL). THE COUNTER ASSEMBLY FAILED DURING FACTORY VISRATION TEST SHOWING A STEADY DC OUTP IT INSTEAD OF A SQUARE MAYE OUTPUT. THE CAUSE OF THIS FAILURE MAS A SHORT CIRCUIT IN TRANSISTOR G-S. CORRECTIVE ACTION-MOME. THE ACTUAL CAUSE OF TRANSISTOR FAILURE IS UNKNOWN.	
#7#7# #10# - #197#2	E MODE HAS BEEN GREATLY REDUCED OROSITTS OF THE MATERIALS USED.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLERANCE. THE MODULE SAVE CORECTIVE ACTION-MOME, FAILURE NOT CONFIRMED.	AUTOFILOT-SQUARE-A/B A	FAILURE MODE-OUT OF TOLERA ED BY A LOSSE COMECTION AT CORRECTIVE ACTION-MOME.	AUTOPILOT-SQUARE-A/B L	FAILURE MODE-OUT OF TOLERA ARGINAL CONDITION IN THE SU TOR GAIN AT LOWER TEMPERATU CORRECTIVE ACTION- IN REQU ODE (IMAGE) FROM THE SUBARS	AUTOFILOT-SQUARE-A/B S 6780 PACKAGE	FAILURE MODE-SMORT GELECTR UT INSTEAD OF A SQUARE MAYE CORRECTIVE ACTION-MONE. THE	

GENERAL DYNAMICS CONVAIR DIVISION

11 JUN 11868

18 JUN 1868	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	ILOT SYSTEM-AIRBON	34.				
第7878 第四十878 - 1848	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE. PART NUMBER	VEHICLE DATE DIF	\$11E 11ME DIF	PRI VENDOR	VENDOR NAME VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	A-AS-US-4382-F YAW DISPLACEMENT 67RO	PAR 7-04250-8	431294	FACTORY	7£8 80		***************************************
FAILURE MODE-FAIL DURING O TATION DETECTOR ISMED) NO & YAW DISPLACENENT GYROSCOPE.	FAILURE HODE-FAIL DURING OPERATION. THE AUTOPILOT GYROGCOPE PACKAGE FAILED DURING SYSTEM TESTS WHEN A SPIN MOTOR RO ATION DETECTOR ISMED) NO 60 MAS OBSERVED. THE FAILURE WAS CAUSED BY LOGS OF LUBRICANT IN THE HOTOR BEARINGS OF THE TAM DISPLACEMENT SYROGOPE.	PACKAGE FAILED DUR LUSED BY LOBS OF LA	IING BYBTEN BRICANT IN	TESTS WHI	EN A SPEK R BEARINGS	NOTOR NO.	
CORRECTIVE ACTION-A SPIN	SPIN MOTOR RELIABILITY PROGRAM WAS STARTED ON THE YAW DISPLACEMENT GYROSCOPE.	TED ON THE YAW DISF	LACEMENT 6	YROSCOPE.			
AUTOPILOT-SQUARE-A/B SYRO PACKAGE	LV-99-D4-4611F SHITO SUBASSEMELY THO	FAR 27-45106-4	631127	FACTORY	YES 60/C NO		488817
FAIL MODE-STRUCTURAL.	MODULE MAD IMPROPER OUTPUT MAYEFORM DUE TO A BROKEN MELD.	DUE TO A BROKEN I	6 10.				
CORRECTIVE ACTION-HOURLY	CORRECTIVE ACTION-HOURLY CERTIFICATION OF WELD STATIONS WAS INSTITUTED.	INSTITUTED.					
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4801C GYRO DISPLACEMENT	FAR 7-04250-1	631126	FACTORY	YES KEANFOTT NO TESOS-EA	17 EA	*******
FAILURE MODE-OUT OF TOLES OR FAILURE AMALYSIS,	TOLERANCE, BIGNAL GENERATOR BENBETIVITY WAS HIGH OUT OF SPECIFICATION. SYRO WAS NOT BUBHITTED F	MA HISH OUT OF B	KCIFICATIO	z. 6720 £	ave TON 81	M 1160 F	
CORRECTIVE ACTION-NOME. N	NO AMALYSIS WAS PERFORMED.						
AUTOFILOT-SQUARE-A/B SYRO PACKACE	LV-88-04-4878-F AAPLIFIER	FAR 27-41455-855	1940	FACTORY	2 Q		98237
FAILURE HODE-OUT OF BPECE B BELOW THE AMOUNT ALLONED	FAILURE MODE-OUT OF SPECIFICATION. THE TORBUER AMPLIFIER WAS REJECTED WHEN AFTER TWO MOURS WARMUP THE GAIN DECREASE D BELOW THE AMOUNT ALLOWED DURING PITCH DISPLACEMENT GAIN TESTS.	REJECTED WHEN APT TB.	CR TWO HOU	*	THE 641N	DECREASE	
CORRECTIVE ACTION-THIS RE CTORY INVESTIGATION.	CORECTIVE ACTION-THIS REPORTED PAILURE MAS HOT CONFIRMED AND NO CAUSE FOR THE REJECTION COULD SE FOUND DURING A PA TORY INVESTISATION.	D NO CAURE FOR THE	REJECTION	COULD BE	FOUND DUR	134 A PA	
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SEMERAL BYNAHICS CONVAIR DIVISION

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11 JUN 1968

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

SUG-STREE	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF TI	BITE PI	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	LV-99-04-4599F RATE 9780	FAR R7-04574-3	•11116 FA	FACTORY VE	YES HONETHELL NO	***************************************
FAILURE MODE-OUT OF TOT THE REASON FOR IT MAE IN	TOLERANCE. THE GYRO WAS REJECTED FOR HAVING A HIGH HYSTEKESIS NULL. THE FAILURE WAS CONFIRMED. TO FOLMD. THIS GYRO WAS AMILYZED FOR THE SAME FAILURE FREVIOUSLY. SEE FAR SP-88-54-4464.	AVING A MIGM MYSTER THE SAME PAILUME P	ESIS NULL. THEFE OUSLY. SE	E FAILURI E FAR BP	. MAS. CONFIRMED. -89-D4-4464.	
CORRECTIVE ACTION-ALL	CORRECTIVE ACTION-ALL CENTER TRANSISTORS MERE PURCED FROM STOCK.	STOCK.	OSE1	FACTORY	YES	**************************************
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	LV-89-04-4494-F AUTOPILOT STRO PACKASE CONSECTOR	33-4100E-8E1	•		ł o	
FAILURE MODE-ERRATIC O	FAILURE MODE-ERRATIC CHERATION. GTRO PACKAGE MAS CONSIDERED FAILED WHEN SMRD LIGHT MAS INTERNITTENTLY NO-GO DURING VIBRATION TEST. FAILURE WAS CAUSED BY AN INTERMITTENT OPEN IN PLUG URASP4 OF THE TEST SET CABLES TO THE GTRO PACKAGE.	D FAILED WHEN SHRD IN PLUG URASP4 OF T	LICHT MAS IN! ME TEST SET (ERNITTEN ABLES TO	TLY NO-GO DURING THE GYRO PACKAGE	
CORRECTIVE ACTION-NO AN	CORRECTIVE ACTION-NO ACTION REQUIRED. PLUGS ARE EXAMINED DURING NORMAL VALIDATION, AND THIS PROBLEM IS CONSIDERED I ISOLATED	URING NORMAL VALIDA	TION, AND THE	S PROBLE	1 18 CONSIDERED A	
AUTOFILOT - SQUAFE - A/B GYRO PACKAGE	LV-99-D4-4407-F REHOTE RATE GYRO PACKASE	FAR 35-41019-3	1350 FA	PACTORY YES		**************************************
FAILURE MODE-OUT OF SPI BY A HIGH SENSITIVITY OF CAP OF THE GYRO HAD BEEL ECETVED FROM VENDOR.	SPECIFICATION. PITCH RATE GYRO GUTPUT WAS OUT OF SPECIFICATION HIGH. THE HIGH OUTPUT WAS CAUSED TY OF THE RATE GYRO. THE HIGH SENSITIVITY RESULTED BECAUSE THE PHASC-ADJUST RESISTORS ON THE END BEEN CHANGED SOMETING AFTER RECEIPT OF THE GYRO AT 6D/C. THE SENSITIVITY WAS SATISFACTORY WHEN R	MAS OUT OF SPECIFIC TY RESULTED BECAUSE THE GTRO AT 60/C. T	ation High. The Phase-al	HE HIGH LUST RES	DUTPUT WAS CAUSED STORS ON THE END FISFACTORY WHEN R	
CORRECTIVE ACTION-6D/C DESIGNEYOS TO DE TRIMACO BY ADJUST 8-45045, 95-41002, AMD 99-410. TO ADJUST TRIMMING RESISTORS.	CORECTIVE ACTION-GD/C DESIGN GROUP REMOVED THE NOTE ON THE GTRO PACKAGE TOP DRAWING ALLOWING THE NULL OF THE RATE GYROS TO DE TRIMED BY ADJUSTHENT OF THE CALIBRATING RESISTORS ON THE CAP OF THE GYRO, DRAWING AFFECTED' 89-41002, 4 8-45045, 55-41002, AND 35-41018, ALTHOUGH THE 2T-XXXXX DRAWINGS COULD NOT BE CHANGED, 6D/C MANUFACTURING AGREED NOT TO ADJUST TRIMMING RESISTORS.	E GYRO PACKAGE TOP ORS ON THE CAP OF T	DRAWING ALLON HE GYRO, DRAN HANGED, 6D/C	THE THE ING AFFE	TOP DRAWING ALLOWING THE MULL OF THE RATE OF THE GYRO, DRAWING AFFECTED' \$9-41002, \$ BE CHANGED, \$0/C MANUFACTURING AGREED NOT	
AUTOFILOT-SQUARE-A/B 6YRO PACKAGE	LV-99-04-4347-F samo bubabember s	FAR R7-45565-5	635113 7.	FACTORY YES	YES GOC HO	
FAILURE MODE-FASE DURIN FACTORY GIVING A NO-GO ED BECAUSE OF TOLERANCE SMPUT SIGNAL, ALTHOUGH	FAILURE MODE-FAIL DURING OPERATION. THE SPIN-MOTOR ROTATION-DETECTOR (SMRD) SUBASSEMBLY I (S/M 3169) FAILED IN THE FAILURE MAS HOT DETERMINED. MOMENER, FAILURES MANE OCCURR ED SECAUSE OF TOLERANCE BUILDURS, TEMPERATURE SENSITIVITY. THE VOLTAGE DROP ACROSS CR-1, AND TESTING MITH A TEST SET SHOUT SIGNAL, ALTHOUGH OPERATION MAY BE CORRECT WHEN A GYRO SMRD SIGNAL IS USED.	N-DETECTOR (3MRD) 3 FAILURE MAS HOT DET THE VULTACE DROP AC 3 SHMD SIGHAL 13 US	UBASSEMDLY 1 ERMINED, HOME ROGS CR-1, AP	(S/H 316) (VER, FAII (D TESTIN)) FAILED IN THE LINES HAVE OCCURR I MITH A TEST SET	

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GENERAL DYNAMICS CONVAIR DIVISION

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THE RECOMENDED THAT CR-1 AND CR-2 ON ANDARDMAN I BE REMOVED. THERE IMPUT DIGGES WERE THOOP SHOULD WITHOUT DIGGES WERE STATED BY THE AIRTONCE CHANKE BOAND 10 MARCH 1864. **LV-98-04-4503-F*** **LECTRICAL. THE MEDULE HAD BO CAPPUT DUE TO A MORT IN DIGGE CRE. THE DIGGE WAS DESTROTED DURING TO INCOME. **LECTRICAL. THE WEGGLE HAD BO CAPPUT DUE TO A MORT IN DIGGE CRE. THE DIGGE WAS DESTROTED DURING TO INCOME. **A-69-04-4553-C*** **A-69-04-4573-F*** **A-	SUG-SYSTEM	TEST/REPORT HUNBER PAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE DATE DIF	\$11E	PRI VENDOR HAME OTH VENDOR PART NO	
LY-SE-GA-GADE-F BENCH LAND HOLD STATE THE STATE STATES STATES HOLD STATES HOL	ORRECTIVE ACTION-IT A ATED TO PROVIDE A GRC . HOMEVER, THIS WAS R	MS RECOMMENDED THAT CR-1 AND CR-E O UND TEST INPUT WHICH IS NO LONGER U EJECTED BY THE AIRFORCE CHANGE BOAR	N BUBABNEMBLY 1 BE RE SED. THEY CAN BE REMO D 10 MARCH 1964.	HOVED, THESE	LOSS OF	SICOES WERE INCOMP	•
THECHTICAL, THE MODILE HAD NO CUTPUT DUE TO A SHORT IN BIODE CRE. THE BIODE WAS DESTROYED DURING. THEORSIBLE TO LEARN THE CAUSE OF THE SHORT CIRCUIT. A-99-04-4533-C F TOLERANCE, DURING GYRO ASSEDBLY TESTING THEE GYROS MERE REJECTED FOR HAVING A HIGH DRIFT. BISHLACEMENT STROMA SINCE FAILURE AMALYSIS MAIVED. A-99-04-4573-F SIGNAL AMPLIFIER B-11-10-10-10-10-10-10-10-10-10-10-10-10-	AUTOPILOT-SAUARE-A/B	-	7AR RY-46189-8		1	O+ 3/09 43/	******
HONE. A-99-04-4334-C DISPLACEMENT STRO FOR T-04530-3 S1111 HO FOR TOLERANCE, DURING STROM ASABDRALY TESTING THREE STROM MERR REJECTED FOR HAVING A HIGH DRIFT. FOR TOLERANCE, DURING STROMA SINCE FAILURE AMALYSIS WAIVED. A-99-04-4573-F SIGNAL AMPLIFIER E7-41379-613 SIGNAL AMPLIFIER E7-41379-613 HO DISPLACEMENT GAIN TESTS. THIS REPORTED FAILURE WAS NOT COMPINED SINCE FUNCTIONAL TESTING REVEAL LV-99-04-4513-F STRUM-MOTOR POTATION-DETECTION COALD BE FOUND. LV-99-04-4513-F STRUM-MOTOR POTATION-DETECTION, SHED S7-45186-S STRUM-MOTOR POTATION-DETECTION SHED S7-45186-S STRUM-MOTOR POTATION-DETECTION SHED S7-45186-S STRUM-MOTOR POTATION-DETECTION SHED STRUM-MOTOR SHED SHED STRUM-MOTOR SHED SHED STRUM-MOTOR SHED STRUM-MOTOR SHED STRUM-MOTOR SHED STRUM-MOTOR SHED SHED SHED SHED SHED SHED SHED SHED		ECTRICAL, THE MODULE HAD NO CUTPUT POSSIBLE TO LEARN THE CAUSE OF THE	DUE TO A JHORT IN DIC MACH CIRCUIT.	DE CRE. THE	9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	AS DESTROYED DURIN	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
A-99-04-4554-C DISPLACEMENT GYRO T-04250-3 S31111 FOLERANCE, DURING GYRO ASSEDBLY TESTING THREE GYROB WERE REJECTED FOR HAVING A HIGH DRIFT. A-99-04-4577-F SIGNAL APPLIFIER A-99-04-4577-F S	ORRECTIVE ACTION-NOM						1
DURING GYRO ABNERGLY TEBTING THREE GYROB MENE REJECTED FOR HAVING A HIGH DRIFT. SF FAILURE NOT KNOWN SINCE FAILURE ANALYSIS WAIVED. 14-4573-F 15-41378-813 ANTIFIER 27-41378-813 16-41378-813 17-41378-813 1	AUTOFILOT-SQUARE-A/B	A-99-04-4534-C DISPLACEMENT 6YRO	FAR 7-04250-3	=======================================		IEB KEARFOTT 40	***************************************
A-99-04-4573-F SIGNAL AMPLIFIER A-99-04-4573-F SIGNAL AMPLIFIER BURING OPERATION. THE SIGNAL AMPLIFIER WAS REJECTED WHEN THE BOARD WAS SUSPECTED OF BEING HEAT SE DISALACEMENT GAIN TESTS. THIS REPORTED FAILURE WAS NOT COMPTRMED SINCE FUNCTIONAL TESTING REVEAL. LV-89-04-4513-F SPIN-MOTOR ROTATION-DETECTOR, SHRD ET-43184-3 , SHEASEMBLY E , SHEASEMBLY E , SHEASEMBLY E NATESTING REVEALED THAT THE US., HAD NO OUTPUT, HOMEVER, ATTER THE UNIT WAS PARTIALLY DEPOTTED A LUME WAS EVIDENT. THE US., HAD NO OUTPUT, HOMEVER, ATTER THE UNIT WAS PARTIALLY DEPOTTED A LUME WAS EVIDENT. THE US. HAD NO OUTPUT, HOMEVER, ATTER THE UNIT WAS PARTIALLY DEPOTTED NAME OBSERVED. NO CORRECTIVE ACTION COULD BE TAKEN SINCE THE FAILURE HOUT WAS NOT IDENTIFIED.	0	LERANCE, DURING GYRO ASSEDBLY TESTS . CAUSE OF FAILURE NOT KNOWN SINCE	MG THREE GYRON MERE A	EJECTED FOR	HAVING	HIGH DRIFT.	
DURING OPERATION. THE SIGNAL AMPLIFIER WAS REJECTED WHEN THE BOARD WAS SUSPECTED OF BEING HEAT SEDISHLACENCHT GAIN TESTS. THIS REPORTED FAILURE WAS NOT CONTINED SINCE FUNCTIONAL TESTS. WE REVEAL. LV-99-04-4513-F LV-99-04-4513-F SPIN-MOTOR ROTATION-DETECTION COULD BE FOUND. LAGASSEMBLY THE SIGNATION-DETECTOR, SHAD 27-43184-S SPIN-MOTOR ROTATION-DETECTOR, SHAD SUBASSEMBLY E REPORTEDLY FAILED AT THE GD/C FACTORY WHEN IT HAD NO LINE TESTING REVEALED THAT THE UNIT HAS PARTIALLY DEPOTTED ANT TESTING REVEALED THAT THE UNIT HAS BUBJECTED TO EXTENSIVE VIBRATION AND TEMPERATURE ENVIRONMENT TESTS WAS COSTRECTIVE ACTION COULD BE TAKEN SINCE THE FAILURE WOOL WAS NOT IDENTIFIED.	OPILOT-SQUARE-A/B		FAR 27-41379-613	1100		res o	992340
NOME, NO CAUSE FOR THE RESELLION COLUBE FORT LV-99-04-4513-F SPIN-MOTOR ROTATION-DETECTOR, 248D 27-45184-3 , SUBASSEMBLY E OPERATE AT PRESCRIBED TIME, SHAD SUBASSE/BLY E REPORTEDLY FAILED AT THE 60/C FACTORY WHEN IT HAD AT TESTING REVEALED THAT THE UNIT WAS SUBJECTED TO EXTENSIVE VIBRATION AND TEMPERATURE ENVIRONMENT TESTING OBSERVED. NO CORRECTIVE ACTION COULD BE TAKEN SINCE THE FAILURE MOSE WAS NOT IDENTIFIED.	AILURE WODE-FAIL DUR! 171 VE DURING ROLL DIE NO DISCREPANCIES.	NG OPERATION. THE SIGNAL ANPLIFIER PLACEMENT GAIN TESTS. THIS REPORTED	MAS REJECTED WHEN THE FAILURE WAS NOT COM	BOARD WAS STREED STREET	FUNCTION	OF BEING HEAT SE AL TESTING REVEAL	
SPIN-MOTOR ROTATION-DETECTOR, SMRD E7-43186-3 , SUBASSEMBLY E THE STING REVEALED THAT THE UNIT HAD NO OUTPUT, HOMEVER, AFTER THE UNIT WAS PARTIALLY D LUKE WAS EVIDENT. THE SMIT WAS SUBJECTED TO EXTENSIVE VIBRATION AND TEMPERATURE EMVIRONM WAS OBSERVED. NO CORRECTIVE ACTION COULD BE TAKEN SINCE THE FAILURE MODE WAS NOT IDENTIFIED.	₽		FAR		- 1	ſĘS	*670**
THE GOAC PACTORY WHE UNIT WAS PARTIALLY D TEMPERATURE EMVIRON DENTIFIED.	O PACKAGE	SPIN-MOTOR ROTATION-DETECTOR, SM. subassembly	RD 27-43186-3			g	
CORRECTIVE ACTION COULD BE TAKEN BINCE THE PAILUNE MODE WAS NOT IDENTIFIED.	AILUME FAILED TO OPEN CUTPUT, BUBSEQUENT T RETESTED, NO FAILUME , AND NO FAILUME WAS	ATE AT PRESCRIBED TINE, SHRD BUBASS ESTING REVEALED THAT THE UN.: HAD N NAS EVIDENT, THE SHIT MAS BUBJECTE OBSERVED.	E-BLY E REPORTEDLY FA O OUTPUT, HOMEVER, AF D TO EXTENSIVE VIBRAT	ILED AT THE TER THE UNITION AND TEM	COVC FA	TORY WHEN IT HAD ATTALLY DEPOTED A KNIRCHMENT TESTS	
		ORRECTIVE ACTION COULD BE TAKEN BIN	CE THE PAILURE HOUE N	MS NOT IDEN	117160.	,	
	the same of the sa	Territoria de la companya de la comp	enginingingings «Limbolishadan) pada sakandan pada sakandan pada sakandan pada sakandan pada sakandan pada sak			TANG JAVA	- ,

CENERAL DYNAMICS

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STATIONE VOICE OF SPECIFICATION TO THE ATTEMATION TO THE PARTIES OF THE PARTIES O	37.37E.W \$48-373TEM	TEST/REPORT NUMBER FAILED COMPONENT MAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE OIF TI	TINE DIF OTH	I VENDOR NAME H VENDOR PART NO	
THE PROPERTY THE BANCHASI FILTER FAILED IN THE FACTARY WICH THE ATTEMUATION AT 725 CP MAS 70 CRETTCATION. THE BANCHASI FILTER FALLE SANDARS FILTER HOP PASS FILTER THAN HE ATTEMUATION AT 816 CP. THE SPECIFICATION AFTER THIS SANDARS FILTER HOP PASS FILTER THAN FROM THIS SANDARS FILTER HOP PASS FILTER THAN FREETHER THE SANDARS FILTER HOP PASS FILTER THAN FREETHER THE SANDARS FILTER HOP PASS FILTER	AUTOFILOT - SQUARE - A/B GYRO PACKÁGE	LY-89-04-4354-F BHO BANDPASS FILTER	FAR 87-04848-3	1	,	S APPLIED COMPON ENTS ACI-3024	277
ALL BANDRASS FILTERS IN STOCK AND IN KIVE MERE FUNCTIONALLY RETESTED. THOSE THAT DID NOT MEET THE REGULTED. LV-SD-O4-4546-F DISPLACEMENT STRO LV-SD-O4-4546-F DISPLACEMENT STRO DISPLACEMENT STRO DISPLACEMENT STRO T-04230-603 BORING OPERATION. THIS DISPLACEMENT SYROGCOPE HAD BOND 3911-HOTOR ROTATION PETERTOR (SHED) OUTPUT D STRO OF HE AUTOFILOT. THE REPORTED FILLING WAS NOT CONTINUED. "FORCETTY CAUSED THE REPORTED FAILURE HAD HOMITORING LINES OF THE STRO PACKAGE TEST SET. THIS MOST PROBABLY CAUSED THE REPORTED FAILURE ROLL TRANSDUCER A-08-04-4253-F ROLL TRANSDUCER A-08-04-4253-F ROLL TRANSDUCER BOLL TRANSDUCER BO		CIFICATION. THE BANCHASS FILTER FA TER THAN THE ATTENUATION AT BIG CP NED THAT THIS REQUIREMENT WAS ADDE NE INSPECTION. TESTS.	ILED IN THE FACTION W. THE SPECIFICATION D. TO THE SPECIFICATION	HEN THE ATTERNED AND APTER THIS	HUATION ATTENUATI	T 725 CPS NAS FO ON AT LEAST 3 18 FILTER NAD PASS	·
LV-99-04-4346-F LV-99-04-4346-F DISPLACEMENT 6TRO DISPLACEMENT 6TRO DISPLACEMENT 6TRO DISPLACEMENT 6TRO DISPLACEMENT 6TRO SIST OF THE AUTORIGE. THIS DISPLACEMENT 6TROECOFE HAD NO SPIN-HOTOR ROTATION RETECTOR 13M4D) OUTPUT O SIST OF THE AUTORIGE. THE SEPONTED FAILURE WAS NOT COMPTABLY CAUSED THE REPORTED FAILURE SHE DETECTIVE COMMECTION IN TEST SET WAS REPAIRED. A-99-04-4523-F ROLL TRANSDUCER A-99-04-4523-F ROLL TRANSDUCER B-93900-DE# B-93900-DE# B-93900-DE# B-10390-DE# B-10390		IANDPASS FILTERS IN STOCK AND IN KI REWENT WERE REJECTED.	YS MERE PUNCTIONALLY	RETESTED. TH	OSE THAT	DID NOT MEET THE	
DUBLING OPERATION. THIS DISALACEMENT SYROACOPE HAD NO SPIN-MOTOR ROTATION PETECTOR (SHED) OUTPUT OF THE AUTOPILOS. THE REPORTED FAILURE WAS NOT CONTINUED. "SOMEWER, AN INTERHITTENT COMMECTION WAS UNDITORING LINES OF THE GYRO PACKAGE TEST SET. THIS MOST PROBABLY CAUSED THE REPORTED FAILURE HAS WASHING LINES OF THE GYRO PACKAGE TEST SET. THIS MOST PROBABLY CAUSED THE REPORTED FAILURE HAS CONTINUED BETWEEN THE CENTER TO A 2020-026 ASILOR FACTORY DURING WANFACTURING TENTS WH WAS DISCOVERED BETWEEN THE CENTER TAP AND CASE. FAILURE WAS CAUSED BY INSUFFICIENT INSULATION ON TAST. LV-89-04-454E-F FAM ASILOR FFECTIVE WITH SAN ASIRESS BY VACUUM POTTING THE INSULATION ON THIS ARTE GYRO WAS REJECTED WHEN THE TORBURE CALIBRATION READING WAS LOW AND OUT THIS AFFORTED FAILURE WAS NOT COMPIRATED. BONK OTHER CAUSED THIS F STALLER WAS NOT COMPIRATED. BONK OTHER COMPONENT MALFUNCTION HAY HAVE CAUSED THIS F WAS DANS HOT COMPIRATED. BONK OTHER COMPONENT MALFUNCTION HAY HAVE CAUSED THIS F WAS DOT SE COMPINED.	AUTOPILOT-SQUARE-A/B	LV-99-04-4546-F D13PLACEMENT 67RO	FAR 7-04230-803				*****
A-99-04-4223-F ROLL TRANSDUCER A-99-04-4223-F ROLL TRANSDUCER B7-93900-026 A-93-04-4223-F ROLL TRANSDUCER B 7-93900-026 A 7-93-04-4223-F ROLL TRANSDUCER B 7-93900-026 B 7-93900-02	FAILURE MODE-FAIL DURIN URING ELECTRICAL TESTS C WAS FOUND IN THE SHED H	M OPERATION. THIS DISPLACEMENT GYR OF THE AUTORILOT. THE REPORTED FAIL KOMITORING LINES OF THE GYRO PACKAG	OSCOPE HAD NO SPIN-HOUSE WAS NOT CONTRIBED E TEST SET, THIS MOST	TOR ROTATION	N INTERHI	(SMED) OUTPUT D TTENT COMMECTION REPORTED FAILURE	
FOLL TRANSDUCER ROLL TRANSDUCER ROLL TRANSDUCER ROLL TRANSDUCER ROLL TRANSDUCER REPORTEDLY FAILED AT GO/C PACTORY DURING HANDFACTURING TESTS WHO WAS DISCOVERED BETHEEN THE CENTER TAP AND CASE, FAILINE WAS CAUSED BY INSUFFICIENT INSULATION ON THE VENDOR INITIATED CORRECTIVE ACTION EFFECTIVE WITH B/N AIRERS BY VACUUM POTTING THE INSULATION ON THE SAFE GYRO WAS RELECTED WHEN THE TORQUER CALIBRATION READING WAS LOW AND OUT THIS REPORTED FAILURE WAS NOT CONFIRMED, BOHR OTHER COMPONENT HALFUNCTION HAY HAVE CAUSED THIS F WAS NOT SEE CONFIRMED.		MUTECTIVE CONNECTION IN TEST SET W	8 REPAIRED.				
THE VEHOOR INITIATED CORRECTIVE ACTOR VASCOVERED BETWEEN THE CENTER ASSTRUCTOR INITIATED CORRECTIVE ACTOR AND SHAPE OF AND SHAPE SPROWED FAILURE WAS NOT COMMED NOT BE CONFIRMED.	AUTOPILOT - SQUARE A/B EYRO PACKAGE	A-99-04-4523-F ROLL TRANSDUCER	FAR 87-93900-026				
¥.		CTRICAL, THE ROLL TRANSOUCER REPOR HECOVERED BETWEEN THE CENTER TAP A	TEDLY PASLED AY GD/C ND CABE, PASLURE WAS	FACTORY DURI	NG MANUFI	CTURING TESTS NOT T INSULATION ON	
		EBOOR INITIATED CORRECTIVE ACTION	EFFECTIVE WITH B/N AS	BETS BY VACI	£ 70111	* THE INSULATION	
FAILURE HODE-OUT OF SPECIFICATION. THIS RATE SYRO HAS REJECTED WHEN THE TCASUER CALISBRATION READING WAS LOW AND OUT OF SPECIFICATIONS. THIS REPORTED FAILURE HAS NOT CONFIRMED. BONK OTHER CONFONENT MALFUNCTION HAY HAVE CAUSED THIS FAILURE, BUT THIS COMED HOT BE CONFIRMED.	NUTOFILOT-SQUARE-A/B	LV-89-04-4542-F rate Gtro	7.2. BY-D4874-8			S HONEYNELL JRSIDIAE	
	FAILURE HODE-OUT OF SPE OF SPECIFICATIONS. THIS AILURE, BUT THIS COLULD IN	CIPICATION, THIS RATE GYRD WAS REAR REPORTED FAILURE WAS NOT CONFIRME OF SE CONFIRMED.	ECTED WHEN THE TCHOUE 3. BOME OTHER COMPCAN	R CALIBRATIC	N READING	MAS LOW AND OUT	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

\$121EM \$46-8731EM	TEST/REPORT HUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DATE DATE DATE DATE DATE DATE DA	PRI VENDOR MANE OTH VENDOR PART NO	
CORRECTIVE ACTION-HOME. I	NO CAUSE OF THE FAILURE COULD BE FOUND.	ouno.			•••
AUTCFILOT-SQUARE-A/B 67R'S PACKAGE	LV-98-04-4609F SMRD BUBASSEMBLY OME	7AR 27-45105-5	651104 FACTORY	YES 60/C NO	***
FAILUME MODE-OUT OF TOLERANCE	RANCE. THE MODULE WOLLD NOT CALIBRATE DURING NEXT ABSEMBLY TESTING.	ATE DURING NEXT ABS	CHBLY TEBTING.		
CORRECTIVE ACTION-MONE. 1 AUTOPILOT-SQUARE-A/B GTRO PACKAGE	THE FAILURE WAS NOT CONFIRMED. LV-99-04-4512-F SPIN-MOTOR ROTATION-DETECTOR, SHED. SUBASSEMELY E.	FAR O 27-43186-3	6311D4 FACTORY	YES NO	980000
FAILURE MODE-FAIL TO CPERATE IT OVERHEATED. SUBSESUENT TES OWED FOR CALIBRATION (\$0-274 I	FAILURE MODE-FAIL TO CPERATE AT PRESCRIBED TIME, THE SHRD SUBASSEHOLY 2 REPORTEDLY FAILED AT THE GO/C FACTORY WHEN IT OVERHEATED. SUBSESUENT TESTING REVEALED THAT THE UNIT HAD NO OUTPUT WHEN CALIBRATED WITH THE RESISTANCE RANGE ALLONED FOR CALIBRATION (SO-274 KILCHNS), HOMEVER, WHEN USING SOO KILCHNS, THE UNIT OUTPUT WAS NORMAL, OVERHEATING CAUSE TO THE UNIT TO REQUIRE A HIGHER CALIBRATION RESISTANCE, BUT NO CAUSE FOR THE OVERHEATING COULD BE FOUND.	SUBASSEMBLY & REPORT DO NO OUTPUT WHEN CA. 500 KILCHMS, THE UN. NO CAUSE FOR THE O	TEDLY FAILED AT THE (LIBRATED WITH THE RE: IT OUTPUT WAS NORMAL VERHEATING COULD BE I	DOC FACTORY WHEN NISTANCE ALL. OVERHEATING CAUSTOWN.	
CORRECTIVE ACTION-NO CORRECTI	RECTIVE ACTION COULD BE TAKEN AS NO CAUSE FOR THE SUBASSEMBLY TO OVERHEAT WAS FOUND.	O CAUSE FOR THE SUB	ASSEMBLY TO OVERHEAT	IMS FOUND.	
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4465-F RATE GYRO	FAR 27-04574-3	SS1102 FACTORY	YES TANEAPOLIS-HO HO NETWELL JRS 101AE	651426
FAILURE MODE-OUT OF TOLERANCE. THE RATE INDICATING D.2 VOLT MHEREAS THE NIMINHUSE OF DEMANETIZED SHRD MACHET UNKNOWN.		Y FAILED WHEN THE S VOLT. CAUSE OF FAIL	GYRO WAS REPORTEDLY FAILED WHEN THE SPIN-MOTOR ROTATION-DETECTOR ALLOWABLE WAS D.S YOLT. CAUSE OF FAILURE WAS A DEMACHETZED SMRD	ETECTOR (SHRD) MAS ED SHRD HAGHET. CA	
CORRECTIVE ACTION-NO CORRECTIVE USIONS CAN NOT BE NADE REGARDING	ACTION TAKEN. ALL THE THE EXACT CAUSE.	LABLE INFORMATION O	AVAILABLE INFORMATION ON THE PROBLEM WAS EVALUATED, AND CONCL	ALUATED, AND CONCL	
AUTOFILOT-SQUARE-A/B	AX63-0003-265D/FC-CO-01-0017-013	COMPOSITE-FACTORY	E85D FACTORY 631101 60	NO 60/C	
FAILURE MODE-FAIL TO CEASE OF ROLL FYRO BIASING) THE GYRO MA TORGUING DURATION.	FAILURE MODE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME, WHEN THE ROLL GYRO WAS UNGROUNDED AT 60 SECONDS (NEGATIVE OLL FYRO BIASING) THE GYRO WAS STILL TORGUING. THE ROLL GYRO NULLING AMPLIFIER (AGE) WAS FAULTY CAUSING AN EXTENDED TORGUING DURATION.	THE ROLL GYRO L	AS UNGROUNDED AT 60 R (AGE) WAS FAULTY C	SECONDS (NEGATIVE AUSING AN EXTENDED	
SYSTEM EFFECT-IMPROPER ANALOG	MALOG SIGNALS.				, <u>.</u>
VEHICLE EFFECT-COMPOSITE DELA	. DELAYED. POST-COMPOSITE TESTING REQUIRED.	LEGUIRED.			
				PAGE 0312	

SENERAL DYNAMICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

TEST/REPORT NUMBER FAILED COMPONENT NAME
GYRO MULING AMPLIFIER.
•
FAILURE MODE-FAIL DURING OPERATION. THE SPIN MOTOR ROTATION-DETECTOR (SMG) SUBASSEMBLY & (8/N 3324) FAILED AT THE Factory: Giving a mo-go indication. This reported failure could not be confirmed.
CORRECTIVE ACTION-NOME. A PREVIOUSLY SUBMITTED ECP FOR IMPROVEMENT OF THE SMRD CIRCUITRY, SPECIFICATIONS, AND TEST EQUIPMENT WAS CANCELLED BY THE AIRFORCE CHANGE BOARD 10 MARCH 1964.
FAILURE MODE-FAIL DURING OFFRATION. THE SPIN-MOTOR ROTATION-DETECTOR (SHED) SUBASSEMBLY 2 ACTORY GIVING A MO-GO INDICATION. THIS REPORTED FAILURE COULD NOT BE CONFIRMED.
CORRECTIVE ACTION-NOME. A PREVIOUSLU SUBMITTED ECP FOR IMPROVEMENT OF THE SARD CIRCUITRY, SPECIFICATIONS AND TEST Ulphint was cancelled by the airforce change board in March 1964.
FAILURE MODE-OUT OF TOLERANCE. THE MAIN GYRO CAN WAS REJECTED FOR HIGH PITCH TORSUING GAINS. CORRECTIVE ACTION-NOME. FAILURE HAS NOT CONFIRMED.
FAILURE MODE-OUT OF TOLERANCE, THE RATE GYRO WAS FAILED WHEN THE UNIT WAS OBSERVED TO HAVE HIGH IN-PHASE NULL. THE IN-FHASE NULL, THE IN-FHASE NULL VOLTAGE WAS 18.8 MILLIVOLTS, THE UNIT WAS DISASSEM BLED AND A DISTORTED GUADRILEVER CAUSED BY MECHANICAL SHOCK WAS OBSERVED. THE SOURCE OF SHOCK COULD NOT BE FOUND.
CORRECTIVE ACTION-IN 1962 IN-PLANT HANDLING AND ABSENBLY PROCEDURES TO PREVENT EXCESSIVE SHOCK WERE INSTITUTED, HOM Ver, this gyro was received in august 1961, and could have been damaged at any time after its receipt.
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GENERAL BYMANICE CONVAIR BIVINGON

19 JUN 1986

DIFFICUL : IES REVIEW-AUTOFILOT SYSTEM-AIASORME

THE DOCK AND THE PARTY OF THE PARTY AND THE	DATE DIP TIME DIP OTH	FAR E41546-607 S1025 FACTORY YES SSESSI	FAILURE MODE-OUT OF SPECIFICATION. THE TORGLER AMPLIPIER FAILED IN THE PACTORY WHEN IT WOULD NOT CALIBRATE PROFERLY. THIS REPORTED PAILURE WAS MOT CONFIRMED AS AMALYSIS REVEALED THAT THE TURNIER AMPLIPIER COLAD BE CALIBRATED AND PURETIONALLY TESTED.		4 COMPOSITE-PACTORY 1350 PACTORY NO 899123	DURING OFCHATION, TELEMETRY DATA POR MEASUREDENT SAED (PITCH DISPLACEMENT GYROF INDICATED TORAUIN DIGINE CUTOFF.		REQUIRED.	(RT12) WAS REPLACED.	FAR 6310R3 FACTORY 7ES 693540	FAILURE MONC-FAILED TO CPENATE AT PRENCRIBED TIME, THE SPIN-MOTOR ROTATION DETECTOR (SMRD) SUBASSENDLY E (S/M 3358) FAILED AT THE FACTORY GIVING A MO-GO ING: CATION. THIS REPORTED FAILURE COULD NOT BE CONTINED.	SCRRECTIVE ACTION-NOME. A PREVIOUSLY BUBNITTED ECP FOR IMPROVENENT OF THE BURD CIRCUITRY, SPECIFICATIONS AND TEST E UIPHENT MAS CANCELLED BY THE AIRFORCE CHANNE BOARD 10 MAKEN 1884.	PAR 621025 FACTORY YES 0003503		PARTIES OFFICE THE REPORTED FAILURE COULD HOT BE CONTINUED.
	FAILED COMPONENT	LV-99-D4-4563-P TORAUER AMPLIFIER	SPECIFICATION, THE TORGUER INT WAS NOT CONTINUED AS AND	F	AX63-0003-1350/FC-CO-02-0502-004 D13#LACENENT 67NO	URING OPERATION, TELEDIETRY DA	PER AMALOG SIGNALS.	WENICLE EFFECT-COPPOSITE DELATED. POST-COPPOSITE TESTING REGUIRED.	CORRECTIVE ACTION-THE AGE PITCH GIRG INPUT MELECT RELAY (R712) HAS REPLACED.	A-98-G4-4540-F Seed subassed 2	TO CPERATE AT PRESCRIBED TIL	CORECTIVE ACTION-NOME. A PREVIOUSLY BUBHITTED ECP FOR IMPROVENEN BUIPWENT WAS CAMCELLED BY THE AIRFORCE CHANGE BOARD 10 MAKEN 1884.	A-96-04-4346-F EMED SUBARRESELY R	URING OPERATION. THE SPIN-NO	O INDICATION. THIS REPORTED PAILURE COULD NOT BE CONTINUED.
1.54 T . 6	X31474-604	AUTOFILOT-SSUARE-A/S	FAILURE MODE-OUT OF . THIS REPORTED FAIL METIOMALLY TESTED.	CORRECTIVE ACTION-MOME.	AUTOFILOT-SEUARE-A/B	FAILURE HODE-FAIL DURING OPENAT 6 AFTER SUSTAINER ENGINE CUTOFF.	SYSTEM EFFECT-INFROMEN ANALOG SIGNALS.	WENTER DIFERT-COM	CORRECTIVE ACTION-T	AUTOPILOT-SQUARE-A/B	FAILURE MONG-FAILED FAILED AT THE FACTOR	CORRECTIVE ACTION-NA BUILMENT HAS CANCELLE	AUTOFILOT-SQUARE-A/B GYRO PACKAGE		CLORY 61 VINE A MO-60

8787EH 848-878TEH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF T	NE DIF OTH	BITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	
AUTOFILOT-SQUERE-A/B	A-08-04-4848-F sent sustablishery &	FAR 87-48106-9	. \$20169	FACTURY YES		*****
FAILURE MODE-FAIL DURIN ACTORY GIVING A MO-GO IN	NATING OFFRATION, THE SPIN-MOTOR ROTATION-DETECTOR (SHED) SUBASSEMBLY 2 (S/NG219) FAILED AT THE SO INDICATION, THIS REPORTED FAILURE COULD NOT BE CONFIRMED.	ON-DETECTOR (BHRD) SI	BASSEMELY R	(8/10219)	FAILED AT THE P	
CORECTIVE ACTION-MOME.	IOME, A PREVIOUSLY SUBMITTED ECP POR IMPROVEMENT OF THE SMAD CIRCUITAY, SPECIFICATIONS AND TEST. ED BY THE AIRFORCE CHANGE BOARD 10 MARCH 1884.	PROVEHENT OF THE BARI CH 1964.). CIRCUITRY.	SPECIFICAT	IONS AND TEST E	
AUTOPILOT - SAUARE - A/B SYNO PACKAGE	A-99-04-4310-F SARD, SURABSERELY E	FAR 27-43166-8	431023 7.1	PACTORY YES		0000
FAILURE MODE-STRUCTURAL. THE E FAILURE MAS ATTRIBUTED TO A	THERE, THE SHEED SUBASSEMBLY & PAILED WHEN AT THE SO/C PACTORY A NO-SO INDICATION WAS OBSERVED. THE SUTED TO A POOR NELD, JOINT AT THE COMECTION OF PIN 3-TO-THE SUBASSEMBLY-CIRCUITRY-	EN AT THE GOZE FACTO	TY A NO-GO IN	DICATION N	AS COSEAVED. TH	The Control of the Co
CORRECTIVE ACTION-DESIGNES, CORRECTIVE ACTION IN LE STREMETH REQUIREMENT!	CORECTIVE ACTION-DESIGN REVIEW WAS COPOUCTED TO IMPROVE OVERALL MODULE ASSEMBLY AND ELIFINATE POSSIBLE TROUBLE SPO TS. CORRECTIVE ACTION INTLUGED ELIMINATION OF STACK MELDING, HOURLY CERTIFICATION OF WELD STATION. THE 8 POUND TENSI LE STRENGTH REQUIRDMENT WAS REPLACED TO A RANGE DETERMINED FROM A DISTRIBUTION CUNYE FOR A PARTICULAR COMDITION OF M ATERIALS.	OVERALL MODULE ASSEM 6, HOURLY CENTIFICATI FROM A DISTRIBUTION	ILY AND ELIVI ION OF WELD I CURNE FOR A	MATE POSSI TATION, TH PARTICULAR	BLE TROUBLE SPO C & POUND TENST CONDITION OF M	•
AUTOFILOT-SQUARE-A/B GTRO PACRAGE	A-98-CA-4511-F 3FIN-MOTOR ROTATION-DETECTOR, BUDA 27-43168-3 88EMBLY E	7AR 5A R7-46168-8	*310gs FA	FACTORY YES		10000
FAILURE HOOG-FAIL DURING OPERATION, THE BAERNED. SUBSEQUENT VESTING ISOLATED THE BCREPHOLES HERE FOLND, HOMENER, FURTHER MOT POSSIBLE.		SHED SUBASSEDBLY E FAILED AT THE GD/C FACTORY WHEN A NO-60 INDICATION MAS O FAILURE TO THE VICINITY OF TRANSISTOR 8-4. 8-4 WAS REMOVED INTACT AND NO DIDEPOITING OF THE UNIT DAMAGED IT TO SUCH AN EXTENT THAT FURTHER TESTING WAS	FACTORY WHEN 8-4. 8-4 WA JCH AN EXTENI	A NO-60 I	NDICATION MAS O MACT AND NO DI MER TESTINÉ MAS	
CORRECTIVE ACTION-UD CO	LO CORRECTIVE ACTION COULD BE TAKEN SINCE THE CAUSE OF FAILURE COULD NOT SE DETERMINED.	CE THE CAUSE OF PAIL	ARE COLALD HOT	BE DETERM	1960.	
AUTOFILOT-SQUARE-A/B	LV-00-04-4477-F 8480	FAR 27-72565-6	E240 WIR	N YES		
FAILURE MODE-ERRATIC CO D OUT INTERANITENTET. A IEGO DID MOT REVEAL ANY	FAILURE MODE-ERRATIC CPERATION, DURING BYBTEM CHECKOUT TEBTB, THE BRIM-MOTOR ROTATION DETECTOR (BHRD) BIGNAL DROPPE D out interamittently, After some trouble Bhodting the Problem Disapperato and DID not recur, further tests at san D Isao DID mot revial any nalfunctions, actual failure mode not confirmed.	STS, THE SPIN-MOTOR I BLEN DISAPPEARED AND NOT CONFIRMED.	NOTATION DETE	CTOR (SHED)	DETECTOR (SMED) SIGNAL DROPPE RECUR, PURTHER TESTS AT SAN D	
CORRECTIVE ACTION-BITE	ITE PERBONNEL MERE INFORMED VERBALLY OF THE PROSEESS OF ANALYSIS UNTIL LAUNCH OF 224D. NO OTHER	F THE PROSECSS OF AM	ALYBIB UNTIL	LAUMCH OF	BE4D. NO OTHER	

SENERAL DYMANICS CONVAIR BIVIBION

12 JUN 1968

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE

CCAUSE TO CCAUSE
LY-SD-D4-4474-F \$10.24 \$10.2
THE CHEMATION. DURING BYSTEM CHECKOUT TESTS, THE SPIN-HOTOR ROTATION DETECTOR (SAND) SIGNAL DROPPE. Y. AFTER SOME TROUBLE SHOOTING, THE PROBLEM DISAPPEARED AND DID NOT RECUR. FURTHER TESTS AT SAN D. ANTER SOME TROUBLE SHOOTING, THE PROBLEM DISAPPEARED AND DID NOT RECUR. FURTHER TESTS AT SAN D. FAILURE NOT COMPTINED—SITE PERSONEL WERE INFORMED VERBALLY OF THE PROGRESS OF ANALYSIS UNTIL LAU MER ACTION WAS TAKEN SECAUSE THE REPORTED FAILURE COLLD NOT BE CONFIRED AFTER EXTENSIVE TESTING. AXAST-COOS-ESSEN/FC-CO-CA-COIS-CIA COMPOSITE-FACTORY 233D NO AMALING AMPLIFIER OMERING OPERATION-THE MOLL DISAPLACEMENT GYNO REMAINED AT ITS POSITIVE LIMIT THROUGHOUT THE TEST DU MOL. MALLING AMPLIFIER. FORTE RESCHEDAGED. THE FAILITY AGE ROLL MALLING AMPLIFIER WAS REPLACED. THE FAILITY AGE ROLL MALLING AMPLIFIER WAS REPLACED.
FAILURE NOT CONTINUED-BITE PERSONNEL MERE INFORMED VERBALLY OF THE PROCRESS OF AMALYSIS UNTIL LAU AND ACTION MAS TAKEN SECAUSE THE REPORTED FAILURE COULD NOT SE CONFISHED AFTER EXTENSIVE TESTING. ANNI-COORS-ESSD/PC-CO-O4-0013-014 CONFOSITE-FACTORY ESSD NO ANALIFIER ANALIFIER OLL MALLING ANFILITER. POSITE RESCHEDUAED. THE FAULTY AGE ROLL MALLING ANFILTER WAS REPLACED. FAST THE FAULTY AGE ROLL MALLING ANFILTER WAS REPLACED.
AXES-COOS-ESSO/FC-CO-DA-DOSS-OLA COMPOSITE-PACTORY ESSO NO AMPLIFIER DARING OPCRATICH-THE MOLL DISPLACEMENT GYNO REMAINED AT 178 POSITIVE LIMIT THROUGHOUT THE TEST DU COCR AMALOS SIGNALS. PROSITE RESCHEDAGE. THE FAULTY AGE ROLL MALLING AMPLIFIER WAS REPLACED. FAST TABLET FACTORY YES TEXAS HASTRUME.
DURING CHERATION-THE MOLL DISPLACEMENT GYNO REWINED AT 178 POSITIVE LIMIT THROUGHOUT THE TEST BU- CHER ANALOG SIGNALS. PROSITE RESCHEDULED. THE FAULTY AGE ROLL MALING AMPLIFIER WAS REPLACED. FAST
OPER AMALOS SIGNALS. POSITE RESCREDALED. THE FAULTY AGE BOLL MALING AMPLIFIER WAS REPLACED. FAR. FAULTY AGE BOLL MALING AMPLIFIER WAS REPLACED.
POBLICE RESCREDUALED. THE FAULTY AGE ROLL MALING AMPLIFIER WAS REPLACED. FAR SAIDE: FACTORY YES TEXAS INSTRUME.
SAN STATE FACTORY YES TEXAS INSTRUME
NO NT NO NT
FAILURE MODE-SMCRT GELECTRICAL). THE SIGNAL ANN-IPIER FAILED BECAUSE OF A SMCRT CIRCUIT DETWEEN THE CASE OF TRANSIS TOR 4-7 AND ITS RETAINING CLIP. THE SMCRT RESULTED BECAUSE THE TRANSISTOR WAS FORCED UP IN THE CLIP CREATING CONTACT BETWEEN THE LIP OF THE TRANSISTOR CASE AND THE LONG'R EDGE OF THE RETAINING CLIP.
CORRECTIVE ACTION-S. ALL APPLICABLE DRAWINGS OF SHE SIGNAL AMPLIFIER WERE MODIFIED TO SHOW CORRECT ASSENDLY OF THE TRANSISTOR AND RETAINING CLIP. E. AN ELECTRICAL TEST IS ACCOMPLISHED TO WERIFY NO ACTUAL OR POTENTIAL SHORT CIRCUITS EXIST DETAINED THE TRANSISTOR AND STR RETAINING CLIP.
AUTOFILOT-BOURE A-00-04-4465-C FAR 63:08: FACTOM: YES GO/C GTRO PACKAGE MARKES-TRAY 87-7273:-1 NO
FAILINE MODE-SHORT KELECT.). THE MARKES TRAY MAS 18/0 POR AN INSULATION BREAKDOMM BETWEEN ALARP! PIN 14 TO GROUND. THAIR MAS NO FAILURE AMALYSIS MADE ON THIS AS THIS UNIT IS PART OF F-UP DATE AND THERE IS NO CONTRACTUAL COVERAGE.
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#31 #A#	TENTANTAL MANAGER	DIF DATA BOUNCE	WENICLE		124	VENDOR MANE	
8UB-818H	FAILED COMPONENT MANE	PART NUMBER	DATE DIF	=	N N	OTH VEHOOR PART NO	-
CORRECTIVE ACTION-MOME,	E. HO AMALYSIS PURFORMED.						:
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	CV-59-D4-1D8-F RATE GYRO 348D	FAR 59-41019~5	631019	FACTORY	3 5 2	5/0 5	****
FAILURE MODE-OUT OF TO. TECTUR OUTPUT, GYROSCOPE ETIZED BY IMADVERTENT AP	FAILUME MODE-OUT OF TOLERANCE, THREE-RAIE GYROSCOME GROUPS FAILED WAEN THEY HAD INSUFFICIENT SPIN MOTOR ROTATION DE Tectur outhul, Gyroscome had low shad outfut, tests thdicated a demanactized shad machet. The shad machet has demach	& FAILED WHEN THEY H TED A DEMACHETIZED & UTPUT PINS.	AD INSUFFE	CIENT SFIN	MOTOR MACAR	ROTATION DE ET MAS DEMAGN	
AUTOFILOT-SQUARE-A/B	LV-99-D4-4319F ROLL-DISPLACEMENT GYRO HEATER-THER 55-41DUE-821	FAR ER 33-4100'E-821	1350	FACTORY	5 3	123157-1	44.0
FAILURE MODE-ERRATIC COARSE HEATER THERMON ENDOR GEARFOTT). SPEC	FAILURE HODE-ERRATIC OPERATION. THE GYRO PACKAGE REPORTEDLY FAILED AT GO/C PACTORY WHEN THE ROLL- DISPLACEMENT GYRO COARSE HEATER THERHODIAT WAS OPERATING INTERHITTENTLY. IT WAS DISCOVERED THAT A WRONG THERHOSTAT WAS INSTALLED BY V MOOR GEARFOTT). SPECIFICATIONS CALLED FOR WENDOR P/N 183537-1, HOMEVER, THERMOSTAT INSTALLED HAD P/N 183137-5.	LY FAILED AT GO/C FA LAS DISCOVERED THAT 137-1, HOMEVER, THER	CTORY WHEN A WRONG TO MOSTAT INS	THE ROLL- FERNOSTAT FALLED HAD	4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ACEMENT GYROUSTALLED BY VIRSEST-S.	
CORRECTIVE ACTION-KEA RTS IN STOCK MERE PROP PART MANGER OF THE CO	CORRECTIVE ACTION-KEARFOIT REVIEWED ALL PARTS IN ASSEMBLY AREA TO INSUME CORRECT THERMOSTATS WENE INSTALLED. ALL PA ITS IN STOCK WENE PROPERLY SEGREGATED, AND AN INSPECTION STEP WAS INSTITUTED IN GYRO ASSEMBLY PROCEDURE, WHENESY THE PART MANDER OF THE CORRECT THERMOSTAT IS VERIFIED.	AREA TO INSURE CORR TEP MAS INSTITUTED I	ECT THERMO H GYRO ABSI	STATE WERE	THS TA	ALLED, ALL PA , WHEREBY THE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
AUTOFILOT-SQUARE-A/B	LV-A9-04-44.7-F ROLL DISPL. 6YRO	FAR 55-4100E-821	1350	FACTORY	YES NO		****
FAILURE MODE-FAIL DUR PHASE A MICH MAS CAUS HE MOUSING, PREVENTING	FAILURE MODE-FAIL DURING OPERATION, GYRO PACKAGE REPORTEDLY HAD NO SHRD OUTPUT, ROLL DISPLACEMENT GYRO HAD AN OPEN PHASE A MICH WAS CAUSED BY TROUBLESHOOTING AND A METAL CHIP FROM THE SHPD MAGNET WAS LEDGED BETWEN THE WHEEL AND ' NE HOUSING, PREVENTING THE PLYMMEEL FROM TURNING.	REPORTEDLY HAD NO SHAD OUTPUT, ROLL DISPLACEMENT GYRO HAD AN OPEN METAL CHIP PRON THE SHED MACHET HAS LODGED BETHLEN THE WHEEL AND T	T. ROLL DI	SPLACEMENT SGED BETTE	EN THE	HAD AN OPEN E WHEEL AND T	
CORRECTIVE ACTION-UMEFULL CORR SAND MACHET IS UNKNOWN. THE 6Y MAILE INSPECTING THE SHED ASSY.	CORRECTIVE ACTION-UMEFULL CORRECTIVE ACTION CAN NOT BE INITIATED BECAUSE THE ORIGINAL CAUSE FOR THE CHIPPING OF THE SAME MACHET IS LUMINGAR. THE GYRO VENDOR WILL HONITOR THE MACHET INSTALLATION AND LOCK FOR CHIPS UNDER A HICROSCOPE HILE INSPECTING THE SHED ASSY.	ITIATED BECAUSE THE MAGNET INSTALLATION	ORIGINAL C.	AUSE FOR T	HE CHI	IPFING OF THE	
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CONATH DIALDS

			LICO SIGNAL WING		-			-	_
	BUB-BYBTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	VEHICLE SITE PRI		WENDOR WENDOR	VENDOR NAME VENDOR PART NO	
	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	#F-##-04-445#-F Transformer	#4# #4-040##-#		FACTORY	2 0	YES THERMADOR NO	8	***
	FAILURE MODE-STRUCTURAL. TRAMSFORMER MAS FOUND TO RS.	UCTURAL, FOUR TRANSFORMERS (\$/N 112-0194, 011-0019, 112-0210, DDS-0108) REPORTEDLY FAILED WHEN EACH Fourd to be cracked on one or more commers near the end of the inserts used to mount the transforme	(8/N 112-0194, 011-0019, 112-0210, 009-0108) REPORTEDLY FAILED WHEN EACH OR HORE CORNERS NEAR THE END OF THE INSERTS USED TO MOUNT THE TRANSFORME	308-0108) INSERTS (REPORTEDL JAED TO MC	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	THE THA	EN ESCONE	
	CORRECTIVE ACTION-THERMA	N-THERMIDOR TRAMSFORMERS WERE RENOVED FROM USE, PER CIC 07432, ECP 7432 DATED 63-09-16. TRAMSFORMER, SUBSTITUTED AS A REPLACEMENT.	USE, PER CIC 07458,	ECP 7452	DATED 63-	1-60	6. TRAN	SFORMER	···
	AUTOFILOT - SAUME - A/B GYRO PACKAGE	LV-29-04-4547-F SARO SUBASSERDLY 1	FAR 27-43183-3	631014	FACTORY	YES GOC NO	ÿ		0
	FAILURE MODE-FAIL DURING FACTORT GIVING A NO-GO IN D BECAUSE OF TOLERANCE BU INFUT SIGNAL ALTHOUGH ONE	FAILURE MODE-FAIL DURING OPERATION. THE SPIN-MOTOR ROTATION-DETECTOR (SHRD) SUBASSENGLY I (8/N 3047) FAILURES IN THE FACTORY GIVING A NO-GO INDICATION. THE EXACT CAUSE OF TAILURE WAS NOT DETERMINED. MONEYUR, FAILURES HAVE OCCURRED DECAUSE OF TOLERANCE BUILDURS, TEMPERATURE SENSITIVITY, THE VITAGE BORD AGROSS CR-1, AND TESTING WITH A TEST SET INFUT SIGNAL ALTHOUGH OPERATION MATRE CORRECT WHEN A GYRO SHRUL IS USED.	-DETECTOR 184RD) SUBASSEMBLY I (8/N 3047) FAILED IN THE ILURE WAS NOT DETERMINED. MOMENTR, FAILURES MANE OCCURRI ENCLINGE MAPP ACROSS CR-1, AND TESTING MITH A TEST SET ND SIGNAL IS USED.	AASSEMBLY MINED. HO BS CR-1. A	1 (8/N 30 EVER, FAI	LURE F VI	FAILED S HAVE TH A TE	TH THE OCCURRE ST SET	
	CORRECTIVE ACTION-IT WAS GROUN CE. HOMEVEN, THIS WAS REJ	CORRECTIVE ACTION-IT WAS RECOMMENDED THAT CR-1 AND CR-2 ON BUBASSEMBLY I BE REMOVED. THESE INPUT DIODES WERE IMCORP HATED TO PROVIDE A GROUND TEST IMPUT WHICH IS NO LONGER USED. THEY CAN BE REMOVED WITHOUT LOSS OF CIRCUIT PERFORMAN E. HOMEVER, THIS YAS REJECTED BY THE AIRFORCE CHANGE BOARD 10 MARCH 1964.	SUBASSENBLY I BE REI D. THEY CAN BE RENOV 10 MARCH 1964.	ADVED. THE	36 1MPUT	0100	ES VERE	1MCORP RFORMAN	
	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	LV-98-04-4547-F 846D 8UBA33578UY 1	FAR E7-45185-3	431014	FACTORY	YES GOO	ğ		
	FAILURE HODE-FAIL DURING HE FAILURE HAS NOT DETERN T, THE YOLTAGE DROP ACROS NO SHEND SIGNAL IS USED.	FAILURE HODE-FAIL DURING CPERATION, I (8/N 2008) FAILED IN THE FACTORY, GIVING A NO-GO INDICATION. EXACT CAUSE OF T HE FAILURE HAS NOT DETERHINED, HOWEVER, FAILURES HAVE OCCURRED BECAUSE OF TOLERANCE BUILDURS, TEMPERATURE SENSITIVIT T, THE MOLTAGE DROP ACROSS CR-1 AND TESTING WITH A TEST SET INPUT BIGHAL ALTHOUGH OPERATION NAT BE CORRECT MHEN A 6T RO SHRD BIGHAL IS USED.	THE FACTORY, GLVING ED BECAUSE OF TOLEN INPUT BIGHAL ALTHOU	A NO-60 1 INCE BUILD SH OPERATI	MOICATION	S G S	ACT CAU	CAUSE OF T SENSITIVIT THEN A 6T	
	CORRECTIVE ACTION-17 MAS GROUN CE. HOMEYER, THIS MAS REJ	CORRECTIVE ACTION—IT WAS RECOMMENDED THAT CR—1 AND CR—2 ON SUBASSENGLY 1 BE REMOVED. THESE INPUT DIODES WERE INCORP HATED TO PROVIDE A GROUND TEST INPUT WHICH IS NO LONGER USED. THEY CAN BE REMOVED WITHOUT LOSS OF CIRCUIT PERFORMAN E. HOMEVER, THIS WAS REJECTED BY THE AIRFORCE CHANGE BOARD 10 WARCH 1884.	SUBASSEMBLY S BE RES D. THEY CAN BE REMON SO MARCH 1864.	FED WITHOU	3E 1MPUT IT LOSS OF	000	ES VERE	INCORP RFORMAN	
	AUTOFILOT-SEUARE-A/B FTRO PACKAGE	LV-89-04-4347-F BAND BUBABENBLY S	FAR 87-44185-8	631014	FACTORY	YE 500	ÿ		
-	w								

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FAILURE HODE-FAIL DURING OPERATION. THE SPIN-MOTOR ROTATION DETECTOR (SHRD) SUBASSEMBLY 1 197N 2003) FAILED IN THE FACTORY GIVING A MO-GO INDICATION. THE EXACT CAUDE OF THE FAILURE WAS NOT DETERMINED. HONEVER, FAILURES HAVE OCCURRE D RECAUSE OF TOLERANCE SUILDUPS, TEMPERATURE SENSITIVITY, THE VOLTAGE DROP, ACROSS CR-1 AND TESTING WITH A TEST SET 1

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	VEHICLE SITE PRI VENDOM NAME DATE DIF TIME DIF OTH VENDOM PART NO	MENT STANL ALTHOUGH OPERATION MAY RE CORRECT MAEN A 64RO SMED SIGNAL IS USED. CORRECTIVE ACTION-17 MAS RECOMMENDED THAT CR-1 AND CR-E ON SUBASSENDLY 5 ME REMOVED. THESE INPUT DIODES MERE PROPED ORATED TO PROVIDE A GROUND TEST IMPUT MAICH IS NO LOWER USED. THEY CAN IE REMOVED MITHOUT LOSS OF CIRCUIT PERFORMAN CE, MOMEVER, THIS WAS REJECTED BY THE AIRFORCE CHANNE BOARD 10 MARCH 1884.	A-DB-D4-432EF BAND CIRCUIT BOARD R7-43187-S AL OPEN, THE BPIN-HOTOR ROTATION-DETECTOR HAD NO OUTPUT, THE FAILURE WAS CONFIRMED AND 18 ATTR D JOINT.	CORRECTIVE ACTION-NAMERACTURING SPECIFICATION NS AS, TOF 18 IN PROCESS OF APPROVAL AND WILL STIPULATE AN HOURLY CERT FFICATION OF WELD STATIONS AND OTHER SPECIFICATION CHANGES TO IMPROVE MELDING BUALITY MAICH WILL PREVENT BROKEN MELD S.	LV-M9-D4-4587-F FAR 631014 FACTORY YES BAND LOSIC AUBASSCHOLY E7-45187-5 GLECTRICAL). THE SPIN-HOTOR ROTATION-DETECTOR (SARD) LOSIC SUBASSCHOLY FAILED WHEN IT HAD NO TE	ENCTRY CUTPUT. FAILURE WAS CAUSED BY THE TELEMETRY LEAD BEING LONG ENCUGN TO BEND OWER AND SHORT CIRCUIT TO THE ET. WOC RETURN BUS. CORRECTIVE ACTION—ASCENDLY PERSONNEL WERE CAUTIONED CONCERNING PROPER USE OF NANNFACTURING TECHNIQUES AND RELATED A DS. INSPECTION PERSONNEL WERE CAUTIONED ABOUT THE CRITICALITY OF SPACING TOLERANCES.	FAR 431014 FACTORY YES 120-16-F FAR 431014 FACTORY YES 130 FALLER HODE-STRUCTURAL. THE SPIN MOTOR ROTATION DETECTOR REPORTEDLY FAILED AT THE GO/C FACTORY WHEN A NO GO INDICATION HAS CASERVED. FAILURE HAS CAUSED BY A BROKEN MELD JOINT ADJACENT TO JUNCTION OF PIN 3.	CORRECTIVE ACTION-DESIGN REVIEW MAS COMDUCTED TO IMPROVE OVERALL MODULE ASSEMBLY AND TO ELIMINATE FORSISLE TROMBLE SPOTS. MG-45.07; DATED 64D316, CALLS FOR MOURLY CERTIFICATION OF MELD STATIONS AND ELIMINATION OF STACK MELDING.
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	DIF DATA SOURCE PART NUMBER	NO SWED SIGNAL IS USED. E ON SUBASSENDLY 3 ME NEW N USED. THEY CAN "E REMOY DARD 10 MARCH 1864.	FAR 27-43187-5 DETECTOR HAD NO OUTPUT. T	F 18 1N PROCESS OF APPROVICES TO IMPROVE MELDING BU	FAR E7-45187-5 OH-DETECTOR (SMRD) LCGIC	D BEIMG LONG DNOUGH TO BE NERHING PROPER USE OF HA ICALITY OF SPACING TOLERA	FAR 631014 FAR 431012 EVASION FAR 631014 FAR EVATE BY SOTATE OF THE GOVE FAR BROKEN WELD ADJACENT TO JUNCTION OF PEN 3.	WE OVERALL MODULE ASSEMBLE
DIFFICULTIES REVIEW	PAILED COMFORENT MANE	DERATION MAY BE CORRECT MHEN A 6YRO SHED SIGNAL IS USED. MAS RECOMMENDED THAT CR-1 AND CR-E ON SUBASSEMBLY 5 ME R NOUND TEST INFUT MHICH IS NO LOWER USED. THEY CAN 1 E REJECTED BY THE AIRFORCE CHANGE BOARD 10 MARCH 1864.	A-BS-06-4322F BARD CIRCUIT BOARD PEN. THE BPIN-MOTOR ROTATION-	TURING SPECIFICATION NS 43.TDI AND OTHER SPECIFICATION CHAIN	LV-MB-G4-4567-F BMED LCGIC SUBASSEMLY RICAL). THE SPIN-HOTOR ROTATS	LEMETRY OUTPUT, FAILURE WAS CAUSED BY THE TELEMETRY LEAD BEING LONG ENOUGH TO BEND OW S VOC RETURN BUS. CORRECTIVE ACTION-ASCEMBLY PERSONNEL MERE CAUTIONED CONCERNING PROPER USE OF HANNFAC IDS. INSPECTION PERSONNEL WERE CAUTIONED ABOUT THE CRITICALITY OF SPACING TOLERANCES.	LV-99-D4-4516-F BAND 8YB ASSEMBLY E IAL. THE SPIM MOTOR ROTATI ON DETEC	REVIEW WAS CONDUCTED TO IMPRO-
11 JUN 1166	N 31 9 10 N N N N N N N N N N N N N N N N N N	CORECTIVE ACTION-17 WAS RESECT. WONEVER, THIS WAS RESECT.	AUTOFILOT-SQUARE-A/B A-BB SYRO MCKASE BMRD FAILURE MCDE-ELECTRICAL OPEN, 18UTED TO A BROKEN MELD JOINT.	CORRECTIVE ACTION-NAMERALI IFICATION OF WELD STATIONS S.	AUTOFILOT - SHURE-A/B LL GYRO PACKAGE FAILURE HODE-SHGAT CLECTH	LENETRY OUTPUT, FAILURE WAS S VOC RETURN BUS. CORECTIVE ACTION-ASICHBLY IDS. INSPECTION PERSONNEL V	AUTOPILOT-SQUARE-A/B L GYRO PACKAGE PAILURE MODE-BYRUCTURAL. TION NA GREENYED. FAILURE	CORRECTIVE ACTION-DERIGH I SPOTS, NG-43.07, DATED SEDI

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	\$\$41 MAT \$1	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT BYSTEN-AIRBOR					_
	SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED CONFOMENT NAME	DIF DATA BOURCE PART HUNGER	VEHICLE DATE DIF	TIME DIF	PRI VENDOR NAME OTH VENDOR PART NO	NAT NO	
	AUTOFILOT-SQUARE-A/B	LV-89-04-4490-F samo module	FAR E7-43169-8	981014	FACTORY YE	YE 3		14001
	FAILURE MODE-OFEN ELECTRICAL. THE SHED MODULE REP FIRMED AND WAS ATTRIBUTED TO A BROKEN WELD JOINT.	I ELECTRICAL. THE SHAD HODULE REPORTEDLY PAILED WHEN IT HAD NO OUTPUT. THE REPORTED FAILURE WAS COM- RIBUTED TO A BROKEN WELD JOINT.	ILED WHEN IT HAD NO	OUTPUT. TH	E REPORTE	FAILURE W	4 COM	
	CORRECTIVE ACTION-CORRECTIONS OF WELD STATION AND	CORRECTIVE ACTION-CORRECTIVE ACTION WAS TAKEN TO PREVENT WELD JOINTS IN THE MODULES. THEY INCLUDED MOURLY CERTIFICA TIONS OF WELD STATION AND ELINIMATION OF STACK WELDING.	LD JOINTS IN THE MOS	JULES. THEY	1 MCI. LIDED	HOURLY CER	117164	
	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	LV-99-24-4515F SWRD \$UBA35EMBLY &	FAR 27-43186-3	631014	FACTORY YE	7.68 50		18/04
	FAILURE HODE-SHORT ELECTY T HAD NO CUTPUT. THE FAILURED PER APPLICATION DRAW HYLAR TAPE WHERE ANY ACCII	FAILURE HODE-SHORT ELECTRICAL, THE SPIN-MOTOR ROTATION-DETECTOR (SHRD) REPORTEDLY FAILED AT THE 60/C FACTORY WHEN I " HAD NO CUTPUT, THE FAILURE WAS CAUSED BY PIN E SHORT CIRCUITING TO THE R7.5 YOC RETURN BUS. THE UNIT WAS NOT ASSEN HED HER APPLICATION DRAWING, REQUIRING A MINIMUM DISTANCE OF 0.0003 INCH BETWEEN ANY TWO CONDUCTORS, OR THE USE OF WILLR TAPE WHERE ANY ACCIDENTAL SHORT CIRCUITING MAY OCCUR.	CTOR (SHRD) REPORTED ITING TO THE R7.5 W	NY FAILED DC RETURN B EH ANY TWO	AT THE 60, US. THE UI COMDUCTOR:	C FACTORY IIT WAS NOT	MHEN 1 ASSEN 18E OF	
	CCARECTIVE ACTION-WANFACTURING PERSONNEL MERE INSTRUCTED TO INCREASE VISILANCE IN	M-MANUFACTURING PERSONNEL MERE CAUTIONED TO FOLLOW VISUA TO INCREASE VIGILANCE IN THIS AREA OF POSSIBLE FAILURES.	MERE CAUTIONED TO FOLLOW VISUAL AIDS AND DRAWINGS EXACTLY, AND INSPECTORS FIVES AREA OF POSSIBLE FAILURES.	AND DRAMIN	68 EXACTL	, AND INSP	EC TOR &	
	AUTOFILOT-SAUARE-A/B	SP-59-04-4438-F FITCH TORGUER AMPLIFIER TRANSDUCER ET-41D02-9ET	FAR E7-41002-9E7	1970	FACTORY YES	YES GO/C		*****
	FAILURE MODE-ELECTRICAL OF WAS TRACED TO A LOOSE ENIT E LAD BEEN PUNCTURED BY A SILED OVER MITH TORGUE PAINT.	FAILURE MODE-ELECTRICAL OPEN. THE GYRO PKG NAS IR/D WHEN THE TORQUING GAIN WAS OBSERVED TO BE LOW. CAUSE OF FAILURE WAS TRACED TO A LODGE ENITER LEAD OF THE DRIVER TRANSISTOR GAS (ENAS) FUTHER ANALYSIS REVEALED THE TRANSISTOR CAS E.A.D BEEN FUNCTURED BY A SHARP INSTRUMENT CAUSING THE ENITTER LEAD TO BE TORN LODGE. THE PUNCTURE HOLE HAD BEEN SEA LED OVER MITH TORGUE PAINT.	E TORQUING GAIN WAS G-6 (EMSB) FUTNER ER LEAD TO BE TORN I	OBSERVED T ANALYBIS R .DOSE. THE	O BE LOW. EVEALED TI PUNCTURE I	CAUSE OF FIE TRANSIST	AILURE OR CAS EH SEA	
	CORRECTIVE ACTION-TRANSI POR THEIR INVESTIGATION. URE ARE NOT KNOWN.	CORRECTIVE ACTION-TRANSISTOR, ITS CASE, AND THE HISTORY OF THE PROBLEM WERE TURNED OVER TO PLANT SECURITY OFFICERS. FOR THEIR INVESTIGATION. NO FURTHER CORRECTIVE ACTION CAN BE TAKEN SINCE CIRCUMSTANCES SURROUNDING THE CAUSE OF FAIL. UNE ARE NOT KNOWN.	THE PROBLEM WERE TUR TAKEN BINCE CIRCUM	HED OVER T	O PLANT SI	INE CAUSE OF	TCERS	
	AUTOFILOT-BEUARE-A/B GTRO PACKAGE	LV-88-04-4523F 67RO	FAR 27-41002-927	1970 631012	ETR YE	2 0		
1	FAILURE MODE-OUT OF TOLES RANCE OR MARGINAL DRIFT RE	OF TOLERAMCE. EMCESSIVE ROLL DRIFT RATE. EMAUSTIVE TESTIMS OF THE PACKASE REVEALED NO OUT-OF-TOLE Drift readimss.	MAUBTIVE TEBTING OF	THE PACKA	SE REVEAL	64 64 0-17-0	F-TOLE	
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

MANE ART NO	09140	981728	a	ù		-	903363	3 g	*****	3 2	-
VENDOR F			RATE OF 28 VELY HIGH.	REMOVED AND				T THE FACTO	3/0 3	V LAB WERE CEIENTLY 10 THER ACTION	
VEHICLE SITE PRI	,	13 YES	IN LOOP DRIFT	PACKAGE MAS	FACTORY YES	PUT. THE FAI	FACTORY TES	MRD FAILED A IEFECTIVE TRA D.	PACTORY YES	BOARD TAKEN TO RELIABILITY LAB WERE IT W INPUT SIGNAL TO A-1 SUFFICEIENTLY TO CAU JENED DOWN BY AFCS. WO PURTHER ACTIOM.	
		7. 1970 631011	ED A HISH OPE	ILE THE GYRO	631011	D) HAD NO OUT	010159	D CINCUIT BONE D CAUSED BY DEF	010160	BOARD TAKEN TINPUT BIENAL	es. Phirippinases and annual security of
DIF DAT' BOURCE	magafastantummangapastantututumpagapastantumpagapastatoristantumpagapagapagapagapagapagapagapagapagapag	COMPOST TE-FRD/DPL E7-41002-827	MENT GYRO IND.CATI UCCEEDING TESTS. OF THE ROLL DICH	MA MAS DELATED WHI	7AR 87-43185-3	104-DETECTON (SMRI NE CAUSE OF FAILU T BE DETERNINED.	FAR 27-43230-5	ION-DETECTOR (SHAK) ISTORTED, THIS HAIL FAILURE COULD NOT	FAR 87-45228-3	T BE CALIBRATED. B S CAN REDUCE THE 1 A NO CR-E MAS TUR	
TEST/REPORT NUMBER FAILED COMPONENT NAME	FAILURE NOT CONFIRMED.	AA63-0039/P3-4HO-01-197 DIBMACEHENT 67RO-ROLL	FAILURE HODE-OUT OF EXPECTED TEST VALUE. THE ROLL DISPLACEMENT GYRO IND.CATED A HISH OPEN LOOP DRIFT RATE OF 28.5 G. /HOUR INCREASING TO 31.5 DES/HOUR AND 32.8 DES/HOUR ON SUCCEEDING TESTS.	WENTELE EFFECT-COUNTDOWN OR COMPOSITE DELAYED. THE COUNTDOWN WAS DELAYED WHILE THE 67RO PACKAGE MAS REMOVED AND REP ACED.	A-99-04-4521F SHRD CIRCUIT BOARD	FAILURE HODE-FAILED DURING OPERATION. THE SPIN-MOTOR ROTATION-DETECTOR (BARD) HAD NO OUTPUT. THE FAILURE MAS CONFID BUT THE MODULE MAS DESTROYED DURING DE-POTTING BETORE THE CAUSE OF FAILURE COULD BE FOUND. CORRECTIVE ACTION-NOWE SINCE THE CAUSE OF FAILURE COULD NOT BE DETERHINED.	A-99-04-4350-F SHED TRANSISTOR	FAILURE MODE-FAILED DURING OPERATION, THE SPIN-MOTOR ROTATION-DETECTOR (SMRD) CIRCUIT BOARD FAILED AT THE FACTORY W HEN THE OUTPUT FROM MODULE PLAZIAS-3 MAS FOLKD TO BE DISTORTED, THIS MAS CAUSED BY DEFECTIVE TRANSISTOR 4-3. TH E CAUSE OF THE TRANSISTOR FAILURE COLLD NOT BE FOLKD. CORRECTIVE ACTION-MOME, THE EXACT CAUSE OF THE TRANSISTOR FAILURE COLLD NOT BE DETERMINED.	A-99-04-4467 BARD	FAILURE MODE-OUT OF TOLERANCE. SHAD BOARD B/M 395 COULD NOT BE CALIBRATED. BOARD TAKEN TO RELIABILITY LAB MERE IT W 6 CALIBRATED. WHEN RETURNED IT FAILED. CRI IN BUBABEMBLY 1 CAN REDUCE THE INPUT BISHAL TO A-1 BUFFICEIENTLY TO CAU 76 A BORDER LIME CONDITION. CORRECTIVE ACTIOM-CHANGE REBUEST TO AIRFORCE TO REMOVE CR-1 AND CR-2 MAS TURNED DOWN BY APCS. NO FURTHER ACTIOM.	
SYSTEM BUB-SYSTEM	CORRECTIVE ACTION-NOME.	AUTOPILOT-SQUARE-A/B GYRO PACRACE	FAILURE MODE-OUT OF EXPLICES ING TO 31 NAMER EFFECT-OPERATION	WENICLE EFFECT-COUNTION	AUTOPILOT-SQUARE-A/B	FAILURE MODE-FAILED DUR! MED BUT THE MODULE MAS DI CORRECTIVE ACTION-NOME :	AUTOFILOT - SQUARE - A/B GYRO PACKAGE	FAILURE MODE-FAILED DURI HEN THE CUIPUT FROM MODIL E CAUSE OF THE TRANSISTON CORRECTIVE ACTION-MOME.	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-OUT OF TOLE AS CALIDRATED. WHEN RETUR BE A BORDER LINE CONDITIC COMMECTIVE ACTION-CHANGE	

GENERAL DYNAMICS COMVAIR DIVISION

15 JUN 1866

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-: INSORNE

PARTICING MODELLA MEMBER AND STAND THE SOLD FUNCTIONED MODIFILE. SUBASSCRIPT IN COLUMNIC 4 END STANDS AND STAN
A SPERATION. NAID BOARD DATA DATA HAS INTO FOR ERRATIC OPERATION. THE PROBLEM HAS ISOLATED TO SUBABLISTION. THE PROBLEM HAVES OF MARM UP THE BOARD FUNCTIONED MCHALLY. SUBABEIGHLY I IN CHANNEL 4 ETH DESIGNATION TO A THE FORE MINISTER FOR EXPONENT TO A SHORT GOLD BY AIR FORCE NO FUNCTION TO A SHORT OF THE F-5003-3P TO A SHORT OF THE SHORT FOR THE SHORT TO THE CATOM TOWENED THE TATOM T

GENERAL DYNAMICS CONVAIR DIVISION

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UNDITIONAL MARCHARM STATES TO STATE AND THE STATES OF ST
IT FAILED TO INDICATE NO-60 LHEN TEST SIGNAL FAILURE ANALTSIS COULD NOT CONFIRM ANY PAIL NTS. FAR SECAUSE NEXT ASSEMBLY CIRCUIT BOARD FOR UAS IRAD LHEN THE CUTPUT OF THE ASSOCIATE FOUTPUT WAS FOUND TO BE NORMAL. FAILURE WAS FOUTPUT BOARD CIRCUIT WAS IRAD FOUND TO ASSEMBLY FOUTPUT BOARD WAS IND LHEN DIODES OF SHOWER HORE THIS TYPE BE SOLDERED. FAR PAILURE FOUTPUT WAS TRUETED OF CAUSE OF FAILURE COTTON PERSONNEL HOTIFIED OF CAUSE OF FAILURE COTTON FECURAL ALSO TORSUE LIMITED TO S INCH-PAILURE COTTON FERNINGENT ALSO TORSUE LIMITED TO S INCH-PAILURE COTTON FECURAL ALSO TORSUE LIMITED TO S INCH-PAILURE COTTON FERNINGENT ALSO TORSUE ALSO TO TORSUE OF FAILURE COTTON FERNINGENT ALSO TORSUE ALSO TORSUE OF FAILURE COTTON FE
FAILURE ANALTRIB COMED NOT CONTINH ANT PAIL FAILURE ANALTRIB COMED NOT CONTINH ANT PAIL FAR BY COUTHUT BOARD THE CUTPUT OF THE ASSOCIATE COUTHUT WAS FOUND TO BE NORMAL. FAILURE WAS CUIT DOARD 27-45518-1 FOR PRINTED CIRCUIT WAS IR/D FO FOR BY SECTION DEPTS. WERE RESUESIZE TO ADHERE HORE FINES TYPE BE SOLDERED. FOR BY SUMPLY CIRCUIT BOARD WAS IRD WHEN DIODES CO SHOWED THE INSULATOR WASHERS USED TO INSULA FOR BY FOR BY STALURIED OF CAUSE OF FAILURI CTION PERSONNEL NOTIFIED OF CAUSE OF FAILURI WOT RECUR. ALSO TORGUE LIMITED TO S INCH-P
FAR BECAUSE NEXT ABSEMBLY CIRCUIT BOARD FAR BY-DASTA-S UMAS INAD WHEN THE CUTPUT OF THE ABSOCIATE DUTPUT WAS FOUND TO BE NORMAL. FAILURE WAS UIT DOARD FAR BY-DASTB-1 TTER-FOLLOMER ANNLIFIER CIRCUIT WAS INAD FOUND TO BE ST-45518-1 THER-FOLLOMER ANNLIFIER CIRCUIT WAS INAD FOUND FOUND BY IND PARTIES OF CIRCUIT WAS INAD FOUND FOUND BY IND WHEN DIODES CONTINUED THE DIODES FOUND THE CENTER OF INDUSTRIANCE THE DIODES FROM THE CENTER OF INDUSTRIANCE. TIOM PERSONNEL NOTIFIED OF CAUSE OF FAILURE WOT RECUR. ALSO TORGUE LIMITED TO S INCH-F
TER-POLICIAER AND THE CUTPUT OF THE ASSOCIATE MAS INTO WHEN THE CUTPUT OF THE ASSOCIATE MAS INTO BE NORMAL. FAILURE WAS IT DOARD TER-POLICIAER ANDLIFTER CIRCUIT WAS INTO FG 3 AND THE PRINTED CIRCUIT LAND WHICH DID P 13 TYPE BE SOLDERED. TONES FARE STAND WAS IND WHEN DIODES COMPONED THE INSULATION WASHERS USED TO INSULATION WASHERS USED TO INSULATION FOR DIODES FROM THE CENTER OF MALLINE. TONE PERSONNEL NOTIFIED OF CAUSE OF FAILURE OF RECUR. ALSO TORSUE LIMITED TO S INCH-P
LED. FAR 830CIATE WAS INCOME. FAILURE WAS IT DOARD 27-45518-1 TER-FOLLOKER AWALIFIER CIRCUIT WAS IR/D FG 3 AND THE PRINTED CIRCUIT LAND WHICH DID P FAR 17 PPE BE SOLDERED. FAR 630CORS 27-4138E-3 COES 27-4136E-3 FAR 6120ES FROK THE CENTER OF MACH-PIONE FROM THE DIODES CONTER OF WALLOW THE DIODES FROK THE CENTER OF WALLOW THE DIODES FROM THE CENTER OF WALLOW THE CENTER OF THE CE
FAR 830 IT DOARD 27-45518-1 FER-FOLLOWER ANYLIFIER CIRCUIT WAS IR/D FG 3 AND THE PRINTED CIRCUIT LAND WHICH DID P TION DEPTS. WERE REQUESILE TO ADHERE WORE IS TYPE BE SOLDERED. FAR 830 ODES 27-41382-3 CDES 27-41382-3 CDES RAUATING THE DIDDES FROM THE CENTER OF MK. 10M PERSONNEL NOTIFIED OF CAUSE OF FAILURING THE CONTER OF MK.
FAR 830 TER-FOLLOMER ANYLIFIER CIRCUIT WAS IR/D FO I AND THE PRINTED CIRCUIT LAND WHICH DID P TON DEPTS. WERE REQUESILE TO ADHERE WORE IS TYPE BE SOLDERED. FAR 838 OPELY CIRCUIT BOARD WAS IRD WHEN DIODES OF OHORD THE INSULATION WASHERS USED TO INSULATION THE DIODES FROM THE CENTER OF INSULATION THE DIODES FROM THE CENTER OF WASHINGTON THE CENTER OF THE CONTER OF THE
EN-FOLLOWER ANYLIFIER CIRCUIT WAS IN'D FOR AND THE PRINTED CIRCUIT LAND WHICH DID POST TO ADMERE HORE SOLDERED. FAR ASSETT ASSESSING THE BOARD WAS IND WHEN DIODES COMED THE INSULATOR WASHERS USED TO INSULATING THE DIODES FROM THE CENTER OF FAILURION FRECUR. ALSO TORGUE LIMITED TO S INCH-POST RECUR.
TION DEPTS. WERE REQUESTED TO ADHERE WORE IS TYPE BE SCIDERED. FAN GSS ODES E7-41382-3 UPPLY CIRCUIT BOARD WAS IRD WHEN DIODES CI HOMED THE INSULATOR WASHERS USED TO INSULA E INSULATING THE DIODES FROM THE CENTER OF MK. IOM PERSONNEL NOTIFIED OF CAUSE OF FAILURI OT RECUR. ALSO TORSUE LIMITED TO S INCH-P
PAK DES E7-41382-3 DES E7-41382-3 CP-41382-3 CP-41
UPPLY CIRCUIT BOARD WAS IND WHEN DIODES CONSED THE INSULATOR WASHERS USED TO INSULATING THE DIODES FROM THE CENTER OF MR. MR. IOM PERSONNEL NOTIFIED OF CAUSE OF FAILURION RECUM. ALSO TORGUE LIMITED TO S INCH-PI
TON PERSONNEL NOTIFIED OF CAUSE OF FAILURE NOT RECUR, ALSO TORBUE LIMITED TO S INCH-P.

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE

CONTICUTANCE AND THE PROPERTY OF A STATE OF	# 7 3 TE W	TEST/REPORT NUMBER	DIF DATA SOURCE	VEHICLE DATE DIF	\$17E	PRI VENDOR NAME OTH VENDOR PART NO	<u> </u>
SP-SP-OG-4446-F SP-SP-OG-4466-F SP-SP-OG-4466-F SP-SP-OG-4469-F SP-SP-OG-6469-F SP-SP-OG-4469-F SP-SP-OG-4469-F SP-SP-OG-6469-F SP-SP-OG-6469-F SP-SP-OG-6469-F SP-SP-OG-6469-F SP-SP-OG-4669-F SP-SP-OG-6669-F SP-SP-	HICA MASHERS.					e de la composição de l	10347
NALLY TEST SET REPAIRED. LV-89-DG-4619F SHED SUBARACHELY THE REPAIRED. LV-89-DG-4619F SHED SUBARACHELY THE RESISTOR F7-43184-3 480 827 FACTORY TES GO.C SHED SUBARACHELY THE RESISTOR F7-43184-3 480 829 FACTORY TES GO.C SHED SUBARACHELY THE RESISTOR F7-43184-3 480 829 FACTORY TES GO.C SHED SUBARACHELY THE GOOT PACTORY TEST WITH CALIBRATICH RESISTORS BALIGHTY BELOW THE FREE OF DATA FAST BOTTORY TEST WITH CALIBRATICH RESISTORS BALIGHTY BELOW THE FREE OF DATA FAST BOTTORY TEST WITH CALIBRATICH RESISTORS BALIGHTY BELOW THE FIRED WALK. THE DYNUG. SF-90-CA-4474-F DISPLACEMENT GYROS HAVE DRIFT, 3/H 3937ABE HAD 8-47 DEC/HR AND 5/H 3269 HAD 13-10 DISPLACEMENT GYROS UNDER A FORD TO CORRECT BHOR DRIFT, 3/H 3937ABE HAD 8-47 DEC/HR AND 5/H 3828ABE HAD 13-10 DISPLACEMENT GYROS UNDER A FORD TO CORRECT BHOR SERIAL MANGER HAVE BAFFLES TO PREVENT VOIDS IN THE FLUID. 6 WALD TO-603 GR-601. SF-90-CA-4488-F SF-90-	AUTOFILOT-SQUARE-A/B	37-99-04-4448-Y 3480-711-188	FAR 87-04843-8		FACTORY	1	
THE RESISTOR ET-43186-3 FAR RESISTOR ET-43186-3 WERE REJECTED. 3/N 3149 AND 3130 HAD NO OUTPUT. BYN E422 FAILED DIODE SPETNED. THE OTHER TWO FAILURES MERE CONTINED AND ATTRIBUTED TO A BUILD DIVER ON THE FACTORY TEST WITH CALIBRATION RESISTORS BLIGHTLY BELOW THE POSSESSE HAD SHOWN TO TEARFOLT THE POSSESSE HAD SHOWN TO TEARFOLT TO THE ACTION TO THE POSSESSE HAD SHOWN TO TEARFOLT TO THE ACTION TO THE ACTION TO THE ACTION WOLDS IN THE PLUID. 6 FAR RECORDED BY DISTRATED PLEK LEADS RESULTING FROM VOIDS IN THE FLUID HOWING TO TEARFOLT TO PREVENT VOIDS IN THE FLUID. 6 FAR RECORTEDLY FAILED WHEN IT WOULD NOT CALIBRATE. FUNCTIONAL TESTING DISTRIBUTED. HOMEN A STUDY IS BEING MADE TO LEARN THE REASON FOR ERROMGOUS COMPLETED.	FAILURE MODE-ELECTRICAL VERSE CURRENT THROUGH TH	OPEN. THE SHRO FILTER HAD NO CUTPUT AT SHRO FILTER.	. THE IMPUT COIL MA	O COMPOS	194 194	THE TEST SET PUT	«
RE OF 3-M EASE WAS NOT COMPINED. THE OFFICE AND 3180 MAD NO OUTPUT, 8/M EASE FAILED DIODE FOR ENGINEES WERE MODE AND ATRIBUTED TO A BUILD FERE WOLLES WERE MAD TO MORK ON THE PACTORY TEST WITH CALIBRATION RESISTORS \$LIGHTLY BELOW THE FIFTED VALUE. FIRED VALUE. SP-99-04-4474-F 59-90-04-4474-F 59-90-04-4474-F 59-90-04-4474-F 59-90-04-4474-F 59-90-04-4474-F TOURSAL. TOO DISP. GYROS IR/D FOR HIGH DRIFT, 8/M 3937ABE MAD 9-47 DEC/HR AND 3/M 3928ABE HAD 13.0 13 3.0 DEC/HR. HIGH DRIFT CAUSED BY DISTORED PACK LEADS RESULTING FROM VOIDS IN THE FLUID MONTH THE GYROS WITH THE LETTER F AFTER THE AFRIKAL MADER HAVE BAFFLES TO PREVENT VOIDS IN THE FLUID. 6 WASON TO-803 GG-801. FARE SMCD TO-803 GG-801. FOR END MODILE REPORTEDLY FAILED WHEN IT WOULD HOT CALIBRATE. FUNCTIONAL TESTING DISPORTED FAILURE. NO TEST MET DISCREPANCES COULD BE FOUND. FORTED FAILURE WAS NOT COMPINED. HOMER A STUDY IS BEING MADE TO LEARN THE REASON FOR ERRONGOUTLONS.	LOT-SQUARE-A/B	LV-99-04-4619F SHEG SUBASSCHELY THE RESISTOR	FAR E7-43188-3		FACTORY	TES 60/C	888
SP-89-04-4474-F SP-89-04-4474-F DISPLACEMENT CORRECT SHED PROBLEMS WAS REJECTED. SP-89-04-4474-F DISPLACEMENT GYROB TURAL. THO DISP. GYROB IR/D FOR HIGH DRIFT, S/N 3937ABE HAD 8.47 DE5/HR AND S/N 3928ABE HAD 13.0 IS 3.0 DE5/HR. HIGH DRIFT CAUSED BY DISTRATED FLEX LEADS RESULTING FROM VOIDS IN THE FLUID MOVIN TIME LEADS. SP-89-04-4469-F SP-89-04-4476-F SP-89-04-4469-F SP-89-04-4476-F SP-89-04-4469-F SP-89-04-4469-F SP-89-04-4469-F SP-89-04-469-F SP	UKE NOSE-OUT OF TOLI TAO. THE FAILURE OF TOLERANCES. THESE I LIHIT OF SPECIFIED	CRANCE. THREE MODULES WERE REJECTED. S/H E432 WAS HOT COMFIRMED. THE OTH WOLUES WERE MADE TO MORK ON THE PAC VALUE.	S/N 3549 AND 3150 ER THO FAILURES MER TORY TEST MITH CALL	HAD NO OUT E CONFIRME BRATION RE	PUT. S/N D AND ATT	2432 FAILED DIODI RIBUTED TO A BUI LIGHTLY BELOW TH	9
SP-99-04-4474-F P-04-250-3 DISPLACEMENT GYROS TY-04-250-3 DISPLACEMENT GYROS TY-04-250-3 TY-04-250-3 TY-04-250-3 TY-04-250-3 TY-04-250-3 TY-04-250-3 TY-04-250-3 TY-04-250-3 TY-04-2469-F TY-04-250-3	ECTIVE ACTION-MANE.	AN ECP TO CORRECT SHED PROBLEMS WAS	REJECTED.		A PARTIE AND	- 1	
THE THE LEADS. IS 8.0 DECCHR. HIGH DRIFT CAUSED BY DISTRICT PLEK LEADS RESULTING FROM VOIDS IN THE FLUID HOWIN THE THE LEADS. ALL GYROG WITH THE LETTER F AFTER THE SCRIAL MADER HAVE BAFFLES TO PREVENT VOIDS IN THE FLUID. 6 WHED TO-803 CR-6801. SP-08-04-4469-F SHOW MODULE FAR 87-45184-3 F TOLERAKE. THE SHAD MODULE REPORTEDLY FAILED WHEN IT WOLLD NOT CALIBRATE. FUNCTIONAL TESTING DISPORTED FAILURE. NO TEST BET DISCREPANCIES COULD BE FOUND. FLOWER THE FAILURE WAS NOT CONFIRMED. HOMER A STUDY IS BEING MADE TO LEARN THE REASON FOR ERROWGOUTIONS.	LOT-SQUARE-A/B ACRAGE	SP-99-04-4474-F DISPLACEMENT GYROS	FAR 7-04250-3		FACTORY		7
MACED TO-803 OR-801. SP-89-04-4469-F SMO MODULE TOLERANCE. THE SMED MODULE REPORTEDLY FAILED WHEN IT WOULD NOT CALIBRATE. FUNCTIONAL TESTING DISPONSE. THE FAILURE WAS NOT CONFIRMED. HOMER A STUDY IS SEING MADE TO LEARN THE REASON FOR EARONGOUTIONS. PAGE 03825 FOUND.	UTE MODE-STRUCTURAL. R. SPEC. VALVE IS B. CGS AND DISTORTING I	. TWO DISF. GYROS IR/D FOR HIGH DRIF O DEC/HR. HIGH DRIFT CAUSED BY DIST THE LEADE.	T, 9/M 3937ABE MAD XYED FLEK LEADB RE	9.47 DE6/H sultine FR	AND 9/A	1 3928ABE HAD 13.(
SP-SP-D4-4469-F SMRD MCDULE SMRD MCDULE RP-43184-3 ROLERANCE. THE SMRD MCDULE REPORTEDLY FAILED MHEN IT MCULD NOT CALIBRATE. FUNCTIONAL TESTING DISCRETANCE. THE FAILURE. MO TEST ACT DISCREPANCIES COULD BE FOUND. NOWE. THE FAILURE MAS MOT CONFIRMED. HOMER A STUDY IS BEING MADE TO LEARN THE REASON FOR EARONGOUTIONS. PAGE 03855	ECTIVE ACTION-ALL 61	TROS WITH THE LETTER F AFTER THE MEN	JAL MUMBER HAVE BAF	FLES TO PR	EVENT VOI	DS IN THE PLUID.	•
SHED HODGLE REPORTEDLY FAILED WHEN IT WOLLD NOT CALIBRATE. FUNKTIONAL THO TEST ACT DISCREPANCIES COULD BE FOUND. I WAS NOT CONFIRMED. HOMER A STUDY IS BEING MADE TO LEARN THE REASON FOR	LOT-SQUARE-A/B	5F-09-04-4469-F SARD MODULE	7.2.48184-3		FACTORY	YES 60/C	***
THE FAILURE MAS NOT COMPIRHED. HOMER A STUDY IS BEING MADE TO LEARN THE REASON FOR	URE MODE-OUT OF TOLE CONFIRM THE REPORTE		AILED WHEN IT WOULD A COULD BE FOUND.	NOT CALIB	ANTE. PW	KTIOMAL TESTIMS	=
PAGE 0383	ECTIVE ACTION-NOVE.	THE FATLURE MAS NOT CONFIRMED. HOME	A STUDY IS BEING	MADE TO LE	JHL NEV	EASON FOR ERRONE	2
	American de la companya de la compa					PAGE 03	T:

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

AUTOFILOT - SQUARE-A/B	T.: SQUARE-A/B	LY-99-04-4449-F	FAR	630927 FAC	۱ 🕳	3/09	093450
		SHRD HODULE	27-45104-H		2		
FAILURE HOS A BROKEN ME	FAILURE MODE-ELECTRICAL OFEN. A BROXEN WELD JOINT IN EACH W	FAILURE MODE-ELECTRICAL OPEN. THREE SHAD MODULES FAILED WHEN THEY HAD NO OUTPUTS (8/H 3121,3312,33136) ALL UNITS HAD A BROKEN WELD JOINT IN EACH MODULE.	MEN THEY HAD NO OUTPY	18 (8/M B121)	3112,3130)	ALL UNITS HAD	
CORRECTIVE	CORRECTIVE ACTION-ENTIRE WELDI	RE WELDING PROCESS WAS REVISED.					
AUTOFILOT-SQUARE-A/B	WARE-A/B	3P-99-04-4447-C 3-80 NETWORK	FAR 27-4555-1	1580 FAC 630927	FACTORY NO	5/09	693449
FAILURE HO H APPLIED RI	FAILURE MODE-ELECTRICAL GPEN. I APPLIED REVERSE WOLTAGE TO TI	FAILURE MODE-ELECTRICAL OPEN. THE SHRD NETWORK HAD NO GUTPUT. THE NETWORK WAS BURNED OPEN BY A FAULTY TEST SET WHIC H APPLIED REVERSE WOLTAGE TO THE NETWORK.	IPUT. THE NETWORK WAS	BURNED OPEN B	T A FAULT	Y TEST SET WHIC	
CORRECTIVE	CORRECTIVE ACTION-FAULTY TEST	TY TEST SET WAS REPAIRED.					
AUTOFILOT-SQUARE-A/B	WRE-A/B	NZ-99-04-4434F TORQUER AMPLIFIER-TRANSISTOR	FAR E7-41378-815	630927 FAC	FACTORY YES		692725
FAILURE MC OF THE AMPL E CAUSED BY	FAILURE WODE-ELECT. SHORT. THE TO OF THE ANMLIFIER HEAT SIMES AND TH E CAUSED BY A CRACKED MICA WASHER.	RQUEN AMPLIFIER E COLLECTORS OF	WAS IR/D NHEN IT MAS GESERVED A SHORT CIRCUIT EXISTED BETWEEN ONE POWER TRANSISTORS 6-7 AND 6-8. THE REPORTED FAILURE WAS FOUND TO B	D A SHORT CIRC	UIT EXIST D FAILURE	ED BETWEEN ONE.	
CORRECTIVE	E ACTION-NO A	CORRECTIVE ACTION-NO ACTION TAKEN AS SOURCE OF THE CRACK	IN THE NICA COULD HOT BE DETERNINED.	IT BE DETERNIN	9.		
AUTOPILOT-SQUARE-A/B	aUARE-A/B E	LV-99-04-4479-F RATE GYRO	FAR 27-04574-3	630827 FA	FACTORY NO	MINNEAFOLIS-HO NEYWELL JRS-101AZ	892492
FAILURE HOTO	FAILURE MODE-OUT OF TOLERANCE COND PER VOLT, MINIMUM ALLONE ESTS INDICATED THAT THE TORBU EJECTED DUE TO BLIGHT TEST SE	. 50/C D 18 0 196 8E T D18C	RECEIVING INSPECTION REPORTED THAT TORQUING SENSITIVITY WAS DIJIES DEGREE PER 114 DEGREE PER SECOND PER VOLT. THE FAILURE WAS NOT CONFIRMED SINCE SUBSEQUENT NSITIVITY WAS WITHIN ACCEPTABLE TOLERANCE. THE GYRO COULD HAVE BEEN ERRONEOUSLYREPANCY SINCE RESULTS WERE BOARDERLINE.	ING SENSITIVITY ARE NAS NOT CO	Y MAS 0.12 NFIRMED S LD HAVE B	ies degree per s Ince subsequent een erroneously	
CORRECTIVI STEPS DEF	CORRECTIVE ACTION-NO CORRECTI SIEPS BEFORE REJECTING SYROM.	CORRECTIVE ACTION REQUIRED, HOMEVER, PERSONMEL RESPONSIBLE MERE CAUTIONED TO TAKE MORE CAREFUL 6 STROM.	R, PEPSONNEL RESPONSI	BLE MERE CAUT!	ONED TO 1	AKE MORE CAREFUI	

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		DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	OFILOT SYSTEM-AIRBOR	¥				f
	8131214 848-878168	TESTZREPONT NUMBER PATLED COMPONENT NAME	DIF DATA BOURCE PART MUNDER	VEHICLE DATE DIF	317E 11ME DIF	0 P E E	SITE PRI VENDOP NAME	 1
	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	LY-98-04-4488-F SHED MODUL TRANSISTOR	FAR 27-43184-3	630887	FACTORY	¥ QX		
	FAILURE MOE-OPEN (ELECTRIC MRS 15GLATED TO TRANSISTER 0 THE FAILURE SINCE CIRCUIT (KCE OF THE EXTERNAL WOLTAGE	FAILURE MOCE-OMEN (ELECTRICAL), THE SHED MODULE HAD NO OUTPUT. THE MODILE WAS DEPOTTED AND THE CAUSE OF THE FAILURE WAS ISCLATED TO TRANSISTER 8-3 (24738 MADE BY TEXAS INSTRUMENTS), ANALYCIS INDICATED THAT AN EXTERNAL VOLTAGE CAUSE. THE FAILURE SINCE CIRCUIT OMERATION DOES HOT SUMMEY ENOUGH THERMOUGH THE BASE OF 83 TO BURN IT OMEN, THE SOU CE OF THE EXTERNAL VOLTAGE WAS NOT FOUND.	PUT. THE MODISEE MAS MENTS). AMAINTSES IND M CURRENT TAROUGH TH	DEPOTTED A ICATED THA E BASE OF	TAN EXT	ERNAL PH IT	OF THE FAILURE, VOLTAGE CAUSE	
	CORRECTIVE ACTION-SINCE THE SOURCE OF UCTION AND TEST PERSONNEL MERE REGUEST	CORRECTIVE ACTION-SINCE THE SOURCE OF EXTERNAL VOLTAGE MAS NOT FOUND. NO CORRECTIVE ACTION WAS TAKEN, MOMEVER, PROD UCTION AND TEST PERSONNEL MERE REQUESTED TO TAKE GREATER CARE WHEN TESTING MODULES.	. NOT FOUND, NO CORRE	CTIVE ACTI LES.	ON WAS TO	IKEM,	HONEVER, PROD	
	AUTOFILOT-SQUARE-A/B STRO PACKAGE	LV-99-04-4530-F HEATER/RATE 67RO	FAR E7-04574-3	630926	FACTORY	£ 0	HOHEYVELL	\$081808
	FAILURE MODE-CONTAMINAT AILURE MAS ATTRIBUTED TO RATION.	FAILURE WOE-CONTAMINATION. THE BATE GYROACOPE FAILED WHEN THE HEATER WINDING WAS REPORTEDLY OPEN CIRCUITED. THIS P AILURE WAS ATTRIBUTED TO CONTAMINATED THERMORTAT CONTACTS MICH PROVIDED AN INSULATING SURFACE PREVENTING HEATER OPE RATION.	I THE HEATER WINDING HICH PROVIDED AN INS	MAS REPORT	EDLY OPEN	A CIR	CUITED. THIS F ING HEATER OPE	-
	CORRELTIVE ACTION-SIMCE VENDOR OF THE THERNOSTAT	THIS WAS THE FIRST FAILURE OF THIS KIND THE ONLY CORRECTIVE ACTION TAKEN WAS TO NOTIFY THE	KIND THE CHLY CORE	CTIVE ACTI	ON TAKEN	ş	TO NOTIFY THE	
	AUTOFILOT - SQUARE - A/8 GTRO PACKAGE	38-99-04-4484-F RATE GYR()	FAR 27-04574-3	6309£4	FACTORY	¥ 0	YES HOKETHELL NO	7
	FAILURE MODE-OUT OF TOLERANCE. 6 COLAD MOT CONFIRM ANY FAILURE.	TOLERANCE. THE RATE GYRO REPORTEDLY FAILED WHEN IT HAD EXCESSIVE MALLS. FAILURE AMALYSIS TESTIMANY FAILURE.	ILED WHEN IT HAD EXC	ESSIVE MA	18. FAILI	7	MALYSIS TESTIM	
	CORRECTIVE ACTION-NOME.	FAILURE NOT CONFIRMED.						
•	AUTOFILOT-SAUARE-A/B GTRO PACKAGE	ap-ab-da-4420P byao amplipiea-rebiator	FAR E7-4100E-827	£1 €0 €30924	PACTORY	2 8	·	******
	FAILURE HODE-BYRUCTURAL. UND TO HAVE A LOOSE LEAD FOLLED OUT.	TIUMAL, GTROSCOPE PRG. WAS IR/D FOR NO OUTPUT FROM THE PITCH SIGNAL AMPLIPIER, RESISTOR R37 WAS FO I LEAD INSIDE THE RESISTOR, THERE WAS NO STRESS RELIEF PROVIDED FOR THE RESISTOR LEADS AND A LEAD	TPUT PROM THE PITCH STRESS RELIEF PROVID	BIGHAL AND ED FOR THE	LIFIER. I		TOR MST WAS FOUND AND A LEAD	
	CORRECTIVE ACTION-MASA LDERED COMPONENTS.	CORRECTIVE ACTION-MASA SPECIFICATION, MSPC 1888 WAS CHANGED TO INCLUDE THE REBUIREHENT OF STRESS RELIEF FOR HAND SO DERED COMPONENTS.	D TO INCLUDE THE REA	UIRENENT O	* ************************************	3	EF FOR HAND SO	
		egeneration of the second state of the second	Andrew State Control of the St	elea generale descripto empleo en constante en constante en constante en constante en constante en constante e			PAGE 0387	-17

SENERAL DYNAMICS CONVAIR DIVISION

11 Jun 1966

9961 WAT 41	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	ILOT SYSTEM-AIRBOR			_
ATETA BLE TENTE	TESTARFORT NUMBER FALLED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE BITE PRI VENDOR PART NO DATE DIF TIME DIF OTH VENDOR PART NO	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT - SQUARE - A/B GTRO PACKAGE	LV-88-04-4840C DISPLACEMENT SPROSCOPE	FAR 7-04850-608	escegs FACTORY Y	YES KEARFOTT NO C70-E506-550	•
FAILURE MODE-OUT OF TOLERANCE PRODUCTION EVALUATION TEBILMS.	TOLERANCE, ENRATIC READINGS IN DRIPT BUE TO MASS "MBALANCE ALONG THE SPIN AXIS OCCURRED DURING IN TESTING.	TO MASS THEMALANCE	ALONG THE BPIN ANIE	OCCURRED DURING	
CORRECTIVE ACTION-NOME.	CORFECTIVE ACTION-MOME. AMALTBIB WAS CANCELLED. THE DISPLACEMENT GYROSCOPE WAS TAKEN TO THE VENDOR PLANT FOR M AND REPAIR.	HENT ETROSCOPE HAS	TAKEN TO THE VENDOR	PLANT FOR TEARDO	
AUTOPILOT-SQUARE-A/B \$7RO-SACKASE	A-A9-04-4422-F -RCLL-013PLACEDENT-6YRO	FAR 27-41002-655	48E FACTORY Y	VES	00203
FAILURE MODE-STRUCTURAL. NO TO BE RUMMING BELON STW NG CAUSING ENCESSIVE MERR.	FAILURE MODE-STRUCTURAL. THE GYRO CANISTER WAS IR/D WHEN IT HAD LOW SMRD OUTPUT. THE ROLL DISPLACEMENT GYRO WAS FOUND TO BE RUMBING BELOW SYNOMEONOUS SPFED. DISASSEMBLY SHOWED THE SPIN-MOTOR BEARING LUBRICANT HAD DRIED IN OME BEARING CAUSING ENCESSINE MEAR.	HAD LOW SHRD CUTFU' THE SPIN-HOTOR BEAI	I, THE ROLL DISPLACE HMG LUBRICANT HAD D	HENT GYRO WAS FOURIED IN ONE BEAR!	
CORRECTIVE ACTION-A NEW NAMED UNIT	CKRECTIVE ACTION-A NEW BEARING LUBRICANT IS NOW BEING USED. THESE GYROB WILL MAVE A SUFFIX C IN THE VENDORS SERIAL MANGER. THE FAILED UNIT SERIAL MANGER DID NOT CONTAÎN THE LETTER C AND DID NOT MAVE THE NEW TYPE LUBRICANT.	THESE GYROS WILL !	AVE A BUFFIX C IN THAVE THE NEW TYPE L	HE VENDORS SERIAL.	
AUTOFILOT-BEUARE-A/B 67RO PACKAGE	A-99-04-4460-F RATE 6TRO CANIBIER	FAR 27-04874-8	630918 FACTORY Y	YES HONETHELL HO	
FALLINE MODE-EXTERNAL LE E, NOME LAS FOLMD, HOT HA IFICATION.	FILLINE MODE-EXTERNAL LEAK. THE RATE GYRO MAS 1870 FOR REPORTEDLY LEAKING OIL. THE GYRO WAS EXANINED FOR OIL LEAKAG. WOMEN FOLAD. HOT MATER AND IMMERSION VACUUM TESTS SHOWED NO LEAKAGE. GYRO OMERATED FUNCTIONALLY TO MITHIN SPEC FICATION.	OTEDLY LEAKING OIL. D NO LEAKAGE, EYRO	THE GYRO WAS EXAMINOPERATED FUNCTIONAL	ED FOR OIL LEAKAG. LY TO MITHIN BFEC	
CORRECTIVE ACTION-NOME. FAILURE NOT CONFIRMED.	FAILURE NOT CONFIRMED.		And the second s	ereninger entere mangeliere de legele per de les ministeres de les enteres de les enteres de les enteres de le	
AUTOFILOT-SQUARE-A/B GYNO PACKAGE	LV-09-04-4320-F	7.2.2 464.64-44	630918 FACTORY	ř. Ho	••••
FAILURE HODE-OUT OF TOLE T HAS OME-HALF THE HORMAL	FAILURE HODE-OUT OF TOLERANCE. THE BPIN-MOTOR ROTATION-DETECTOR (BHRD) BUBABSEMBLY 5 (BNRBBB) FAILED WHEN THE OUTPU : MAS ONE-HALF THE MORNAL FRESUENCY.	TOR (BHRD) BUBABSE	OLY 1 (SN2946) PAIL	ED WHEN THE OUTPU	والمراجعة والمحمودة والمحمود
CORRECTIVE ACTION-MOME.	COMPECTIVE ACTION-MOME, THIS REPORTED PAILUME MAS NOT CONFIRMED. EMHAUSTIVE TESTIMS REVEALED NO OUT-OF-SPECIFICATIO N VALUES AND NO TEST ESUIPMENT DISCREPANCIES MERE FOUND.	IMED. EIDHAUSTIVE TE	NTIMO REVEALED NO OF	JT-0F-8PECIFICATIO	
				PA6C 0326	

GENERAL BYNAMICS CONVAIR DIVISION

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	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOKA	u				_
STSTEN SUB-RTSTEN	TESTAREPORT HUNGER FAILED COMPONENT NAME	DIF DATA SCURCE PART NUISER	VEHICLE SITE PRI	\$17E 71MC D1F		VENDOR NAME VENDOR PART NO	
AUTOFILOT-BAUARE-A/B	LV-88-D4-4328-F 8HRG 8UBASSEMBLY 1	FAR E7-43189-3	630910	FACTORY	# Q		9111
FAILUME MODE-OUT OF SPECIFICATION. THE UTPUT WAS CHE-HALF THE MORNAL FREGUENCY.	OF SPECIFICATION, THE SPIN-MOTOR ROTATION-DETECTOR (SHED) BUBASSEMBLY 1 (SHESGS) FAILED WHEN THE O THE MORNAL PRESUENCY,	DETECTOR (SMRD) SUBA	88EMBLY 8	(8083VE)	Ž	ED WHEN THE O	
CORRECTIVE ACTION-MOME. IN TALUES AND NO TEST EQUIF	CCRRECTIVE ACTION-NOME. THIS REPORTED FAILURE WAS NOT CONFIRMED. EXMANSTIVE TESTIME REVEALED NO OUT-OF-SPECIFICATIO I TALUES AND NO TEST EQUIPMENT DISCREPANCIES WERE FOUND.	RMED. EXMAUSTIVE TER	TIME REVE	ALED NO	27.0	SPECIFICATIO	
AUTOFILOT-SQUARE-A/B GYNO PACKAGE	A-99-04-4486-F RAIE 67RO	FAR 87-04574-3	630916	FACTORY	763 7	YES HONEYMELL NO JRSIDIAE	8190013
FAILURE MODE-OUT OF TOLERANCE. THE RATE 67RO INSTITUTIVE WAS D-1249 WOLT PER DEGREE PER SECON REE PER SECOND. THE FAILURE WAS ATTRIBUTED TO NEWER, DISASSEMBLY FAILED TO REWEAL THE BHORT.	FAILURE MODE-OUT OF TOLERANCE. THE RATE GIRO OUTPUT WAS REPORTED LOM. BUBSEQUENT TESTS REVEALED THAT THE AVERAGE SENSITIVITY INS 0.1849 VOLT PER DESMINITY WAS 0.1849 VOLT PER DECISION. THE FAILURE WAS ATTRIBUTED TO A SHORT CIRCUIT INTERMAL TO THE BIGHAL GENERATED SECONDARY WINDING. HOWEVER, DISASSEMBLY FAILED TO REVEAL THE SHORT.	ORTED LOW. BLOSEQUEN E LOW LIMIT FOR AVER I INTERMAL TO THE BI	T TESTS R AGE SENSI GRAL GENE	EVEALED TIVITY IS	14AT	HE AVERAGE SE VOLT PER DEG IT MINDING. HO	
CORRECTIVE ACTION-NO COR	CORRECTIVE ACTION-NO CORRECTIVE ACTION WAS TAKEN AS NO CAUSE FOR THE SHORT CIRCUIT COULD BE FOUND.	E FOR THE SHORT CIRC	UTT COULD	BE FOUND	ان		
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-AS-O4-4406-F Gyro packase-corsector	FAR R7-44534-901	£330 €30916	FACTORY	ž ç		
FAILURE MODE-STRUCTURAL. IN D OF THE AE COMMECTOR I	FAILURE MODE-STRUCTURAL, PKG NAS IR70 FOR NO ROLL SIGNAL AMPLIFIER ON LINE 305U J2-5, WHEN PKG, RCVD FOR ANALYSIS P IN D OF THE JE COMMECTOR WAS FOUND BENT AT AN ANGLE OF 30 DEGREES TOWARD SMELL, FUNCTIONAL TESTS ON PKG, SHOWED PROF EN OPENATION, THE PIN WAS PROBABLY BENT DURING TRANSPORTATION OR DURING INSTALLATION.	PLIFIER ON LINE 3031 GRES TOWND SMELL. N OR DURING INSTALLA	12-5. W	EN PK6. P L TESTS O	Q E	CA AMLYSIS P	
CORRECTIVE ACTION-FACTOR	CORRECTIVE ACTION-FACTORY PERSONNEL MERE CAUTIONED TO BE EXTREMELY CAREFUL WHEN HANDLING AUTOPILOT PACKAGES IN ORDE	TREMELY CAREPUL WIEN	HANDLING	AUTOPILO	74	KAGES IN ORDE	
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-09-04-4478-F SHED SUBASSCHOLIES MO. E-TRANSISTO E7-45186-3 R	FAR 187-43106-18	630913	FACTORY	22		
FAILURE HODE-FAIL DURING HAD NO OUTPUTS. 8/N 3095, N IN THE PRODUCTION AREA LEN OF CORRECTLY IDENTITY	FAILURE MODE-FAIL DURING CRERATION. DURING FACTORY TEATING THE FOLLOWING THREE SAND BUBASSEMBLIES NO. 2 REPORTEDLY MAD NO OUTPUTS. S/N 3045, S/N 3115, B/N 3103, THE OUTPUT TRANSLETOR FOR EACH UNIT WAS FOUND TO BE OFFIN. INVESTIGATION IN THE PRODUCTION AREA REVEALED A MOSSISILITY OF APPLYING EXCESSIVE WOLTAGE TO THE OUTPUT TRANSLETOR DUE TO A PROBLEM OF CORRECTLY IDENTIFYING THE TRANSLETOR LEADS.	THE FOLLOWING THREE HISTORY FOR EACH UNI	AMED BUBA T MAR FOUT	SSEMBLIES	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	E REPORTEDLY INVESTIGATION BUE TO A PROS	

CORRECTIVE ACTION-A PROCEDURE TO CORRECTLY IDENTIFY THE LEADS WAS INSTITUTED-THEREFORE THE VOLTAGE MISAPPLICATION H

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SEMERAL DYNAMICS CONVAIR DIVISION

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74447		S SOUTH TATE BOX SALES	AE TO LE	11.6		VENDOR MANE	_
BLO-SYSTEM	FAILED COMPONENT NAME	PART NUMBER	0416 017	=	5	OTH VENDOR PART NO	
AS BEEN ELIMINATED.							****
AUTOFILOT-SQUARE-A/B GTRO PACRAGE	C7-88-04-104-F SMRD-TRANSISTOR 6-1	FAR 55-4100E-8E1	80808	FACTORY	ă õ	5/05	***
FAILURE MODE-FAIL TO C UMINATE AFTER AFFLICATI ON THE BASE OF TRANSIS	FAILURE WOSE-FAIL TO OPERATE. THE SPIN MOTOR ROTATION DETECTOR LAMP ON THE GYROSCOPE PACKAGE TEST SET FAILED TO ILL Unimate after application of syroscope spin motor power. The Failure is attributed to a high voltage being impressed On the base of transistor m-1, the source of this voltage colld not be pound.	ETECTOR LAMP ON THE GY THE FAILURE IS ATTRIB GE COALD NOT BE FOUND.	ROSCOPE PAC	KAGE TEBI	33	THE GYROSCOPE PACKAGE TEST SET FAILED TO ILL ATTRIBUTED TO A HIGH VOLTAGE BEING INFRESSED FOUND.	
CORRECTIVE ACTION-NOME.			,				
AUTOFILOT-SAUARE-A/B	A-99-04-4461-F RATE-1NTEGRATIMG/DISMLACENENT	FAR 7-04250-803	1366	FACTORY	÷ 8	YES KEARFOTT NO	****
FAILURE M'DE-OUT OF YOLDRANCE, THO PLOATEZ E CROSS COUPLING INTO THE YAW AXIS, IT MAS ON OPERATED MORMALLY, THE IMPUT NOTCHES MAC COMPECTIVE ACTION—ALL PRODUCTION PERSONEL.	FAILURE WIDE-OUT OF TOLGRANCE, TWO FLOATED RATE-INTEGRATING GYROB (B/NRD1-2026 AND 203-2448) MERE 1870 FOR EXCESSIVE CROSS COUPLING INTO THE YAW AXIS. IT WAS DETERMINED THEIR INDUT NOTCHES MERE OUT OF ALIGNAEMY. AFTER RESETTING GYROS COUPLING INTO THE INFECTION. COPERATED NORMALLY. THE INPUT NOTCHES MAD BEEN MOWED AFTER THEY MERE SET BY RECEIVING INSPECTION. CORRECTIVE ACTION-ALL PRODUCTION PERSONEL CAUTIONED NOT TO ADJUST POSITIONING SRACKETS ON GYROS.	DETERMINED THEIR GYROS (S/NEDL-EOZS AND EDS-EA46) NER DETERMINED THEIR INPUT NOTCHES MERE OUT OF ALLGAMENT. DEEN MOVED AFTER THEY MERE SET BY RECEIVING INSPECTIO CAUTIONED NOT TO ADJUST POSITIONING SRACKETS ON SYROS.	# AND 203-2 OUT OF ALI RECEIVING 1	CAMENT. A MSPECTION MSPECTION	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D FOR EXCESSIV RESETTING GVR	
AUTOFILOT - SQUARE - A /B	CV-98-04-111-F RATE 6YRO	FAR 35-41019-5	£30803	ETA	22	enter de la companya	07424
FAILURE MODE-ERRATIC OF ED INTERNITIENTLY AT A B CORRECTIVE ACTION-NOME.	: OPERATION, REMOTE-RATE GYROGCOPE PACKAGE FAILED WHEN THE TEST SET PITCH WALLED LAMP EXTINGUISH A 8 TO 7 CP8 RATE NO FAILURE IN GYROGCOPE PACKAGE POUND, PAILURE WAS IN TEST SET. ME.	ACKAGE PAILED WHEN THE ORCOPE PACKAGE FOUND.	TEST SET P	ITCH HULL	8 ×	AND EXTINGUISM	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	CT-98-12DP DISPLACEMENT 67RO MEATER	FAR 35-41002-615	1260	ETR	20	5/04	*****
FASELWE MODE-OPEN (ELE MED INDICATION, THE BARR MITTEMT OPEN CIRCUIT MA	ELECT). THE MAIN 678G CAN WAS REJECTED FOR LOW PITCH DISPLACEMENT GAIN AND AND AN INTENHITTENT S BARD NO-GO WAS NOT CONTINED. THE LOW GAIN WAS ISOLATED TO THE PITCH DISPLACEMENT GYAG. AN INTER WAS POUND IN THE PINE HEATER WINDING. IT WAS SURNIZED THIS DISCREPANCY CAUSED THE LOW GAIN.	ED FOR LOW PITCH DISPLINGATED TO FE IT WAS SURMIZED THAN	ACEMENT GAI THE PITCH B DISCREPAN	M AND AND DISPLACEN CY CAUSED	A H	INTERNITYENT B EVAO. AN INTER LOW GAIN.	
CORRECTIVE ACTION-NOME	CORRECTIVE ACTION-HOME. A STUDY MAS RECOMENDED OF THE SYNO HEATER SPLICES.	STRO HEATER SPLICES.					
						PA65 0330	

GENERAL DYNAMICS CONVAIR DIVIBION

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13 JUN 1848

FAILURE HODE-OUT OF SPECIFICATION. THE RATE GYROGOME FAILED WHEN MULL VOLTAGE OUTPUT WAS REPORTEDLY 1 WOLT. THE 6Y ROACOME OPERATED WITHIN SPECIFICATIONS CALL FOR LESS THAN 85 HILLIVOLTS AND SPECIFICATIONS CALL FOR LESS THAN 85 HILLIVOLTS. THE REPORTED MULL VOLTAGE OF 1 VOLT MAS EXTREMELY HIGH AND PROBASLY ERROMEOUS.
COMMECTIVE ACTION-NOME. THE REPORTED FAILURE WAS NOT COMFINED. TOPILOT-SQUARE-A/B LY-98-04-4475-F PAR 6308E9 FACTORY NO RO PACKAGE SMED-DIODE 27-43829-5 NO RO PACKAGE PACKAGE FAILURE REPORTEDLY PAILED WHEN A TOP PACKAGE FAILURE REPORTEDLY DAMAS PALL SUBASSENGLY-1, 8. IMPUT DIOCE (1M58) WAS FOUND SHORTED. CAUSED BY EXTERNAL APPLICATION OF HI-VOLTAGE.
CORRECTIVE ACTION-MONE. SECONDARY FAILURE. WICHILOT-SQUARE-A/B 4-99-04-4404-F FAR 8508E9 FACTORY NO MO THO FACKAGE SHRD-MAGNET 27-04574-3 NO MO FAILURE MODE-OUT OF TOLERANCE. RATE GYRO IR/D FOR LOM SHRD OUTPUT. ANALYSIS FOUND A DEMAGNETIZED SPIN MOTOR ROTATION NO EXECUTE MAGNET. FAILURES OF THIS TYPE ARE CAUSED BY EXTERNAL APPLICATION OF OVERWOLTAGE.
CORRECTIVE ACTION-NOWE. NO CONCLUSION COULD BE DRAWN FOR POSSIBLE CORRECTIVE ACTION. FAR 630829 FACTORY YES STATE 640099 FAILOR FAILED WHEN THERE WAS NO TORBUER CUTPUT IN THE ROLL C HAMMEL. THE ROLL GYROSCOPE GROUP REPORTEDLY FAILED WHEN THERE WAS NO TORBUER CUTPUT IN THE ROLL C HAMMEL. THE ROLL GYROSCOPE TORBUER MINDING AND TORBUER CALIBRATION RESISTOR WERE CAPEN CIRCUITED. IT IS CONCLUDED. EXTRAMEDUS VOLTAGE FOUND. CORRECTIVE ACTION-NO CORRECTIVE ACTION RECOMMENDED AS THE BOUNCE OF EXTRAMEDUS VOLTAGE COULD NOT BE FOUND.
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SENERAL DYNAMICS CONVAIR DIVISION

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		DITICULIE BEVILL'ACIONIC O'S'CA'	DELLO STOCK ALABO		-	-		_
SYSTEM SUG-SYSTEM		TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART 1. JHBER	VEHICLE DATE DIF	BITC PRI	# 6 # 6	VENDOR NAME VENDOR PAST NO	
AUTOFILOT-SQUARE-A/B		A-99-04-4481-F. ELAPSED-TIME INDICATOR	FAR 83-51800-008	6309E8	FACTORY	ž 9	HAYDON K£5207	:
FAILURE MODE-COHT EAR. FURTHER INVES	TANIMA	FAILURE MODE-CONTANTMATION. ELAPSED-TIME INDICATOR FAILED DUE TO LACK OF UNION BETWEEN Ear. Further investigation revealed that dirt and other particles caused binding of the	DUE TO LACK OF UNION	H BETWEEN THE G	THE WORN GEARS.	SEAR SEAR	UNION BETWEEN THE WORM SEAR AND THE SPUR & BINDING OF THE GEARS.	
CORRECTIVE ACTION-RECOMENDATIONS FREE OF ALL CONTAHINATIONS WAS ACC PROCEDURES, AND CLOSER INSPECTIONS.	H-RECO-	CORRECTIVE ACTION-RECOMMENDATIONS TO VENDOR TO INSTALL BETTER QUALITY CONTROL TO INSURE DIE-CAST GEAR COMPOMENT ARE FREE OF ALL CONTAHINATIONS WAS ACCOMPOLISMED. ALSO, THE WENDOR INITIATED MORE EFFECTIVE CLEAMING, BETTER DEBURRING WOCEDURES, AND CLOSER INSPECTIONS.	ER QUALITY CONTROL DOR INITIATED MORE	TO INSURE	DIE-CAST CLEANING	CEAR	COMPONENT ARE TER DEBURRING	
AUTOFILOT-SQUARE-A/B	•	A-99-04-4411 SARD SUBASSEMBLY-1	FAR 27-43185-3	\$30826	FACTORY	2 €	2/09	983150
FAILURE MODE-FAIL GE OF 25 YDC. SUBA THE RISE TIME OF	ASSEMBLE TO OF THE TE	FAILURE MODE-FAIL TO OFERATE, THREE SHRD SUBASSENGLIES WERE IR/D WHEN MO CUIFUT COULD BE CSTAINED AT A SUFFLY VOLTA GE OF 25 YOC. SUBASSENGLIES WERE TESTED BY FAILURE AMLYSIS AND FOUND 6000. AFTER ADDITIONAL TESTS IT MAS DETERMINED THE RISE TIME OF THE TEST SIGNAL WAS OUT OF TOL. CAUSING MALFUCTIONING OF SHRD CIRCUIT.	E IR/O WEEN NO CUTP AND FOUND COOD. AF NEFUCTIONING OF BANK	UT COULD BE TER ADOLITIO D CIRCUIT.	COTAINE	45	A BUPPLY VOLTA	
CORRECTIVE ACTION- AUTOPILOT-SQUARE-A/B GYRO PACKAGE	0	MO FAILURE. RAR A-89-04-3770 REGIZED ADJUSTRENT OF MAYEARATE OF THE STREAM NO RELAT 630820 NO RELAT 27-04574-003	CO4FOSTE-1 FACT 27-04574-003	1970	ETA	22		* 6 3 5 6 9
FAILURE MODE-OUT OF SPECIFICATION STRIEM EFFECT-OPERATION TOO HIGH. WEHICLE EFFECT-COMPOSITE DELAYED.		FAILURE MODE-OUT OF SPECIFICATION, YAW GYRO WOULD NOT MULL. AGE RELAYS CAUSED PROBLEM. SYSTEM EFFECT-OPERATION TOO HIGH, YAW GYRO WOULD NOT MULL. WEHICLE EFFECT-COMPOSITE DELAYED.	, AGE NELAYS CAUSED	PROBLEM.				
CORRECTIVE ACTION	- NCM	CORRECTIVE ACTION-REMACED AVE RELAYS AND ANDLIFIEM.						
AUTOPILOT-SQUARE-A/B GTRO PACKAGE		\$P-99-04-4458-P RATE GTRO	FAR 27-04574-3	197-D 4304£0	PACTORY	ž 3	YES HONEYNELL.	*****
FAILURE HODE-OUT OF TOLFRANCE. THE RA- FOUND IN-PHANE MULL VOLTAGE TO BE ELIT FOUND SHRIDE GYRO TO ACCOUNT FOR THIR.		F TOLERANCE, THE RATE-6YRO WAS IR/O FOR IN-PHASE MULL VOLTAGE OUT OF TOLERANCE, FAILURE ANALYSIS VOLTAGE TO BE 21.7HT SMILE SPEC. CALLS FOR NO MORE THAN 18.0HY. NO ABNORMAL COMDITIONS COULD BE DACCOUNT FOR THIS.	IN-PHASE MULL VOLTA	GE OUT OF 1	FOLERANCE SNORMAL C	rai	LURE ANALYSIS IONS COULD BE	
CORRECTIVE ACTION		CORRECTIVE ACTION-NOME, FAILURE COULD NOT BE CONTINED.						
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SENERAL DYNAMICS CONVAIR DIVISION

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VENDOR NAME	OTH VENDOR PART NO	YES HOWEYMELL NO JRSIDI AE	AS CONFIRMED THE MULL TO		GE TEMPERATION THAT IS	YES HIMMMOMETHEL.	r EXCEEDED 1		BBERVED. FAI	PAGE 0333
		2	AUSEN AUSEN	4ES	7 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 0	76.04 46 18	, ž	D em	
37.16	DATE DIF TIME DIF	FACTORY	ING. FAIL	PACTORY	LE AT TOP IED FROM T FAILURE	FACTORY	S OPERATI	ž.	EL DRIFT	Activities and the control of
VEHICLE	DATE OF	030080	TOGS COUPLING THE STATE OF TAIL	430417	NE UNSTAB 10 TO SOME 1 UNSCLDEN	630814	GYRO MULL MILE IT I	630013	OLL CHAIN	
STARFORT WUNGER DIF DATA SOUNCE Y	PART NUMBER	FAR 27-04874-3	TRO HAD EKCLASIVE CH -CIRCUIT IN MALL AD. STOR LAS NOT ISOLATE	FAR 38-41060-611	IED WHEN CUTPUT BECA ALFFIER IS ATTRIBUTE PACITOR, WHEN IT WAS KY TO DISAPPEAR. COMMENDED BINCE THE	FAR 27-04574-3	TENT HIGH MALL. THE TEMPERATURE SPEC V	FAR 55-41002-813	CHECKS, EXCESSIVE P DISPLACEMENT GIROSCO BE DIRECTED TO CORRE	
TEST METORY NUMBER	FAILED COMPONENT NAME	.F.	OPEN, DURING NEXT ASSEMBLY TEST, 6YRO HAD EKCLASIVE CROSS COUPLING, FAILURE MALL YOLTAGE, AN INTERNITENT OPEN-CIRCUIT IN MALL ADJUST ŘESISTOR R-2 CAUSE KUITED RESISTOR WAS MOT ISOLATED. SINCE CAUSE (5 OPEN-CIRCUITED RESISTOR WAS NOT ISOLATED BY FAILURE ANALYSIS.	CT-99-04-100 F BIGHAL AMPLITTER-CAPACITOR	NTIC OPERATION, SIGMAL AMPLIFIER WAS REJECTED WHEN CUTPUT BECAME UNSTABLE AT TOP PACKAGE TEMPERATUR RE WAS CONTINUED. FALLINE OF THE SIGNAL AMPLIFIER IN ATTRIBUTED TO SOME PROPERTY OF C-6 TRAT IN THE SINT, IT IN CONCLUDED NOW CHANGE TO THE CAPACITOR, WHEN IT WAS UNSCLOENED FROM THE SIGNAL AMPLIFIER TAKEN PLACE, CAUSING THE ORIGINAL DISCREPANCY TO DISAPPEAR.	نو .	OF TOLERANCE, RATE GYKO IA7D FOR INTERNITTENT HIGH MALL. THE GYRO MALL INTERNITTENTLY EXCEEDED SPE GYRO HAD BEEN RUN AT 170 DCG. F., THE UPPER TEMPERATURE SPEC WHILE IT IS OPERATING IS 180 DES. F. N ERMITTENT HIGH MALL COALD BE FOUND. CAUSE OF HIGH MALL COALD NOT BE FOUND. NO CORRECTIVE ACTION TAKEN.	CT-88-04-086 ROLL DISPLACEMENT GYRO WIRE	CTURAL, DURING AUTOPILOT BYBTEH READINESS CHECKS, EXCESSIVE ROLL CHANNEL DRIFT MAS OBSERVED. FAILU O HIGHLY DISTORTED PLEXLEADS IN THE ROLL DISPLACEMENT GEROGCOPE	
1631	FAILED	K-98-04-4587-F RATE 67RO-RESISTOR	PEN. DURING I MLL VOLTAGE, ULTED RESIBI INCE CAUSE OF	CT-99-04-100 F	TIC OPERATION, SIGNA, EL MAS CONFIRMED. FALLENT. IT IS CONCLUDED AREN PLACE, CAUSING HO. CANIMETEL CORE. TAIS.	A-99-04-442:F RATE 67R05CLF	ANCE. RATE SI BEEN RUN AT IT HISH MALL	CT-88-04-096 ROLL DISPLACE	DUMING AUTOP DISTORTED FI	
X3L TAR	BUB-STER	AUTOFILOT-SQUARE-A/B	FAILURE MODE-ELECTRICAL OPEN, DURING MEXT ASSEMBLY TEST, 67RO HAD EXCLESSIVE CROSS COUPLING, FAILURE MAS COMFIRMED UE TO EXCEPTIONALLY HIGH MALL VOLTAGE, AN INTERNITIENT OPEN-CIRCUIT IN MALL ADJUST RESISTOR R-2 CAUSED THE MULL TO E HIGH, CAUSE OF OPEN-CIRCUITED RESISTOR MAS NOT ISOLATED. CORRECTIVE ACTION-MOME, SINCE CAUSE OF OPEN-CIRCUITED RESISTOR WAS NOT ISOLATED BY FAILURE AMALTSIS.	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MOE-ERRATIC OPERATION, SIGNAL ANPLIFIER WAS REJECTED WHEN OUTPUT BECAME UNSTABLE AT TOP PACKAGE TEMPERATURE. R. REPORTED FOUND TO SOME PROPERTY OF C-6 TRAT IS TEMPERATURE WAS CONFINED. FALLURE OF CASINGENED FROM THE SIGNAL AMPLIFIER BOARD, MAY MANE TEACH TO THE SIGNAL AMPLIFIER BOARD, MAY MANE TAKEN PLACE, CAUSING THE ORIGINAL DISCREPANCY TO DISAPPEAR. CORRECTIVE ACTION-NO GANINGFUL CORPECTIVE ACTION CAN BE RECOMMENDED SINCE THE CAUSE OF FAILURE OF CAPACITER C-6 MAS S LOST DURING AMALYSIS.	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-OUT OF TOLER CIFICATIONS AFTER GYRO HAD O CAUSE OF THE INTERMITTEN CORRECTIVE ACTION-CAUSE OF	AUTOPILOT - SQUARE-A/B GYRO PACKASE	FAILURE MODE-STRUCTURAL. RE IS ATTRIBUTED TO HIGHLY CORECTIVE ACTION-MOME, I	

13 JUN 1868

SENES. DYNAMICS CONVAIR DIVISION

	111 107 11	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	PILOT SYSTEM-AIRBOR	¥					1
	SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	BITE TIME DIF		PRI VENDOR NAME OTH VENDOR PART NO	MAKE PART NO	
	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	CT-88-04-087 6780-78AN313TOR	FAR 33-41002-615	909069	ETA	2 Q			• 000
	PAILUME MODE-ELECTRICAL 6 6AIN IN THE ROLL CHANNE NE RESULTED IN A SHORT CI ROYING TRANSFORMER T-1.	FAILUME MODE-ELECTRICAL SHOMT, GYROSCOPE PACRAGE FAILED DURING PERFORMANCE OF PROCEDUME 27-20856-BR7, A LOW TOMBUING 6 6AIN IN THE ROLL CHANNEL WAS INDICATED, FAILUME IS ATRIBUTED TO AN IMPROPERTY MOUNTED TRANSISTER, IMPROPER MOUNTI HE NESALTED IN A SHORT CIRCUIT FROM THE TRANSISTOR CASE TO THE HEAT SINK, BURNING TRANSISTOR COLLECTOR LEAD AND DESTROYMENT THE	PACHAKE IS ATTRIBUTED TO AN IMPROPERLY MOUNTED TRANSISTER, IMPROPER MOUNTS PAILURE IS ATTRIBUTED TO AN IMPROPERLY MOUNTED TRANSISTER, IMPROPER MOUNTS IANSISTOR CALECTOR LEAD AND DESTINANSISTOR COLLECTOR LEAD AND DEST	PROCEDURE F MOUNTED NG TRANSIB	FT-EBSS-TRANSIST	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	A LOW A	FORBUTA MOUNTI MD DEBT	
	CORRECTIVE ACTION-NOME. E INSTRUCTED IN THE PROPE	CORRECTIVE ACTION-NOME. IT WAS RECOMMENDED MANUFACTURING AND INSPECTION PERSONNEL BE INFORMED OF THIS FAILURE AND E INSTRUCTED IN THE PROPER WETHOD OF MOUNTING THE EMBS TRANSISTOR MOUNTING POSITION.	D INSPECTION PERSONSISTOR MOUNTING POST	EL BE INT 1710H.	овнего об	ž.	PATLUR	9 QIV 1	
	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-90-04-4412-P 8480	FAR E7-45202-001	36	e 5	č š	2/9		*****
	FAILURE MODE-FAIL DURING RE INDICATION WAS CAUSED	DURING OPERATION. THE GYRO PKG MAS IR/D WHEN A NOMENTARY SHAD NO GO MAS CBSERVED. MOMENTARY FAILU CAUSED BY SUFFLY VOLTAGE DROFFING TO 23 VDC WHEN VENICLE INVERTER NAS STARTED.	HEN A MOMENTARY BARI C 184EN VIDHICLE INVEL	TER LAB	S CBSERVE	¥ é	DHENTARI	FAILU	***
	CORRECTIVE ACTION-BAR A-90-04-\$771MRITTEN ASKIM PLY RELOCATED TO NINIMIZE WOLTAGE DROP. MANBER OF	CORRECTIVE ACTION-RAR A-90-04-\$771WRITTEN ASKING FOR AN INVESTIGATION OF THEFOMER SUPPLY CAFACITY SE MADE. POMERSUP Ly relocated to minimize voltage drop. Marber of Cells in Battery changed.	FOR AN INVESTIGATION OF THEPOS CELLS IN BATTERY CHANGED.	ER BUPPLY	CAPACITY	36	WDE. P	MERSON	
-	AUTOFILO1-SQUARE-A/B GYRO PACKAGE	8F-99-04-4376-F RATE 67RO-CANISTER	FAR E7-41703-808	136D 630731	FACTORY	YES 60/0	2/03		# # # # # # # # # # # # # # # # # # #
	FAILURE MODE-FAIL DURING UE TO WIRES 6 AND J BEING AT THE SOLDERED BEAM.	DURING CHERATION. ROLL GYRO CASE RUFTURED AT TERMINAL END DURING TESTING. FAILURE MAS CONFIRMED O 1 being reversed which bypassed the Gyro Thermostat and Alloned Gyro Heating until the Case Burst 14.	AT TERMINAL END DUN HERMOSTAT AND ALLONG	IS EVRO HE	WG. PAILL	36	13 COM	BURST	
	CORRECTIVE ACTION-60/C R NSTRUCTED AND CONDITION I	CORRECTIVE ACTION-60/C REVIEWED FACTORY INSPECTION PROCEDURES AND FOUND THEM ADEBUATE, PERSONNEL CONCEDURS WERE NSTRUCTED AND CONDITION IS CONSIDERED NON-REPETITIVE.	ES AND FOUND THEN AS	Seunte. P	ER Schwede L	0	# # E.	13a 3a	*****
	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	P1-CCD-01-136	CONFOSTIE-B FACT	136F	ETA 418	2 4			
	FAILURE MODE-ERRATIC OPE ALID INCORRECT SPEED INDI	FAILURE MODE-ERRATIC OPERATION. TELEMETRY MEASUREMENT 8384K; BPIN MOTOR TEST OUTPUT, DEACTIVATED FOR E SECONDS. A Y ALID INCORRECT SPEED INDICATION MOULD BE FOR 3 SECONDS. AN ELECTRICAL TRANSIENT IS SUSPECTED.	, BPIN MOTOR TEST OF LECTRICAL TRANSIENT	JPUT, DEA 18 SUSPEC	: 11 YA 160 160 .	5	3 600 34	> < .	
	SYSTEM EFFECT-IMPROPER DISCRETE SIGNAL.	DISCRETE SIGNAL.							·······················
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GENERAL DYNAMICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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STRICK SUB-STRICK	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART HUMBER	DATE DIF TIM	TIME DIF OTH	- 1	
CORRECTIVE ACTION-UMEN	JAR NOLM,	-				*****
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-4372-F FILTER-ELECTRICAL	FAR 27-04848-3	630730 FAC	FACTORY YES	YES ACI	********
FAILURE MODE-OUT OF SPEC FIRMED BUE TO OUT OF SPEC MCREASE SHAD RELIABILITY.	SPECIFICATION. BANDRASS FILTER FAILED WITH GUTPUT VOLTAGE CUT OF SPECIFICATION. FAILURE WAS CON Specification cutoff, Failure resulted from addition of more stringent cutoff resulrements to 1 .177.	D FROM ADDITION OF MO	MT OF SPECIFIE STRINGENT	CUTOFF RE	AILURE WAS COM	
CORFICTIVE ACTION-6D/C	CORFICTIVE ACTION-6D/C RETESTED ALL FILTERS RECEIVED BEFORE FEBRUARY 1943 MAICH WERE STILL IN STOCK OR HEXT ASSEMBL Kits: all Filters not meeting new more stringent cutoff requirements were removed from stock.	RE FEBRUARY 1963 WHICHERTS WERE REM	WERE STILL	IN STOCK (DR HEXT ASSEMBL	
AUTOPILOT - SPUARE-A/B GYRO PACKAGL	A-99-04-4396-F RATE GYRO RESISTOR	FAR 27-04301-1	630729 FAC	FACTORY YES	YES HONEYMELL NO JRT 114	883072
FAILURE MODE-OUT COT TO T IN 67RO. THE REASON FI CORRECTIVE ACTION-HOME EY FAIL BY JRS 101AR 677	FAILURE MODE-OUT OF TOLERANCE, GYRO HAD HG OUTPUT, FAILURE WAS COMFIRMED DUE TO RESISTOR MISSING FROM PIN F TO PIN 7 IN GYRO. THE REASON FOR THE MISSING RESISTOR NOT BE FOUND. CORRECTIVE ACTION-HOME, SINCE CAUSE OF THE MISSING RESISTOR WAS NOT FOUND AND JRT114 GYROS ARE BEING REPLACED AS THE FAIL BY ARS 101AE GYROS.	IE WAS CONFIRMED DUE TO IE FOUND. OR MAS NOT FOUND AND	RESISTOR MI	SSING FROM	REPLACED AS TH	
AUTCOLLOT-SQUARE-A/B GTRO FACKAGE	SP-59-04-4390-F SIGNAL GENERATOR/BEARING	FAR 7-04250-803	630724 FAC	FACTORY YES	KEARFOTT CTD2504000	***
FAILURE MOLS-OUT OF TO AS CONFIRMED DUE TO DEFI AND INSPECTION OF THRUS	' TOLERAKE. DISPLACEMENT GYRO PERFORMANCE SHOMED LOM OUT OF SPECIFICATION SENSITIVITY. FAILURE W Defective signal generator end thrust bearing. Failure caused by improper namufacture, assembly Brust bearing.	NCE SHOMED LOM OUT OF BEARING, FAILURE CAUS	SPECIFICATION	N SENSITI	FITT. FAILURE W FURE, ASSEMBLY	
CORRECTIVE ACTION-VENDO ARING IN STOCK. ALBO, SC ROGRAM. VENDOR INITIATES THE INSERT.	CORRECTIVE ACTION-VENDON ACCOMPLISHED TOU PERCENT REINSPECTION FOR DIMENSIONS AND FOR BRAZED JOINT ON ALL THRUST BE ARING IN STOCK. ALSO, SO PENCENT OF THE STOCK WAS X-RAYED. NO REJECTIONS RESULTED FROM THIS REINSPECTION AND X-RAY P ROGRAM, VENDOR INITIATED TOD NERCENT X-RAY INSPECTION ON NEW PROCURENENT THRUST BEARINGSTO ASSURE PROPER SEATING OF THE INSERT.	CTION FOR DIMENSIONS . NO REJECTIONS RESULTI EW PROCUREMENT THRUST	IND FOR BRAZE D FROM THIS BEARINGSTO A	D JOINT OF REINSPECTI SSURE PROF	4 ALL THRUST BE ION AND X-RAY OF ER SEATING OF	
AUTOPILOT-SQUAPE-A/B GTRO PACKAGE	A-09-04-4579-F DISPLACEMENT 67RO	FAR 7-04250-8	#30719 FAC	PACTORY YES	YES KEARFOTT NO CTORSOGOO	
FAILURE MODE-DRIFT, THE RCESSIVE FIRED RESTRAIN	FAILURE MODE-DRIFT, THREE GYROB EXHIBITED HIGH DRIFT DURING TEST, FAILURE NAS COUFIRHED ON ALL THREE GYROS DUE TO Keesive fixed mestmaint drift, based on fast experience, failures were caused by one or more distorted flexleads.	NG TEBT. PAILURE NAS - FAILURES NERE CAUSED !	COUPTRHED ON	ALL THREE E DISTORTI	SYROS DUE TO E ID FLEXLEADS.	
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E SITE PRI VENDOP MANE			FACTORY YES THERMADOR NO	TRANSFORMERS HAD CRACKED CASES ON ONE OR MORE CORNERS MEAR THE END OF THE MOUNTING I DUE TO TRANSFORMER POTTING COMPOUND INDUCING STRESSES DURING TEMPERATURE CYCLING. MO POTTING COMPOUND STRUCTURALLY INSUFFICIENT UNDER TEMPERATURE CYCLING. ED CIRCUIT (NEW 27-04176 TRANSFORMER SUBSTITUTED AS A REPLACEMENT).	FACTORY YES	SPIN MOTOR TRANSFORMER MAS FOLMD CRACKED IN THREE CORNERS THREE OTHER TRANSFORMERS WERE RESPONDED CORNERS. FAILURE COMPIRED. THE MOTTING COMPOUND IS STRUCTURALLY INSUFFICIENT TO TEMPERATURE CHANGE. THANS-FORMER IS A RELATIVELY NEW TYPE. PREVIOUSLY BEING USED ONLY FOLIUSE OF ITS HIGHER LURRENT CARBILITY. NO ADDITIONAL SPACE IN THE GROGOPE "ACKAGE MAS ALLINER, WHICH WAS COMPOSED OF LESS POTTING MATERIAL SHACE WINDING WERE LARGER. TESTS INSTITUTISEM GROUP VALIDATED THIS CONCLUSION.	SE, DATED SCPTEMBER 16, 1965.	PACTORY YES KEAFOTT NO CYDESJEODO	INCUIT. FAILURE WAS CONFIANCD	PACE 0336
E VEHICLE DATE DIF	REMENTS IN	630719	63071	STRESSES NOERS TEMPER	1160	CORNERS THE COMPOUND IS NEW TYPE, L. SPACE IN INCE WINDS!	42. ECP 74	420747	N MEATER C. RMINED.	
DIF DATA BOURCE	P AND COOLDONN REBUT	FAR 27-04574-3 UTPUT, FAILURE MAS C	THIS OCCURRANCE.	I CASES ON ONC OR HOR NG COMPOUND INDUCINE MALLY INSUFFICIENT U	F1R 27-41330-605	MD CRACKED IN THREE FIRMED. THE POTTING THREE 13 A RELATIVELY BILLTY. NO ADDITIONAL BOTTING MATERIAL BLUBION.	RON USE, PER CIC 075 EMENT,	FAR 7-04850-8	BILCAY THERMOSTAT I	
TEST/REPORT NUMBER FAILED COMPOMENT NAME	CORRECTIVE ACTION-SD/C INCORPORATED NEW MANDLING, WARNUF AND COOLDONN REQUIREMENTS INTO GYRO PROCEDURES. VENDOR RED	A-88-04-4373-F FAR 890719 FACTORY YES HONETHELL RATE GYRO-SHED NO JRS101AE TOLERANCE, TWO GYROS HAD LOW SHED OUTPUT, FAILURE HAS CONFIRMED BUT CAUSE OF FAILURE NOT DETERM \$13.	CORRECTIVE ACTION-LAKNOWN, SURD CIRCUIT REDESIGNED SINCE THIS OCCURRANCE. TOPILOT-SQUARE-A/B SP-99-04-4377-F RO PACRAGE TRANSFORMER-CANISTER E7-04-5395-3	FAILURE HODE-STRUCTURAL. THREE TRANSFORMERS HAD CRACKED CASES ON ONE OR HORE CORNERS MEAR THE END OF SERTIL SELURES WERE CONFIRMED DUE TO TRANSFORMER POTTING COMPOUND INDUCING STRESSES DURING TEMPERATURE. TPHOBABLE CAUSE OF FAILURE IS POTTING COMPOUND STRUCTURALLY INSUFFICIENT UNDER TEMPERATURE CYCLING. CORRECTIVE ACTION—60/C MEDESTGMED CIRCUIT (NEW 27-DAITS TRANSFORMER SUBSTITUTED AS A REPLACEMENT).	CT-99-04-086-F SPIN MOTOR TRANSFORMER	FAILURE MODE-STRUCTURAL, SPIN MOTOR TRANSFORMER MAS FOUND CRACKED IN THREE CORNERS THREE OTHER TRANSFORMERS MERE RE LECTED AT THE SAME THE FOR CRACKED CORNERS, FAILURE COMPINED. THE POTTING TOMPOUND IS STRUCTURALLY INSUFFICIENT TO BEDINER REPEATED CYCLES OF TEMPERATURE CHANGE, TRANS-FORMER IS A RELATIVELY NEW TYPE, PREVIOUSLY BEING USED OWLY FO BY THE MERCHAY PROGRAM BECAUSE OF ITS HIGHER CURRENT CAPABILITY NO ADDITIONAL SPACE IN THE GYROSCOPE "ACKAGE MAS ALL OTTED FOR HEAVIER TRANSFORMER, WHICH MAS COMPOSED OF LESS POTTING MATERIAL SINCE WINDING WERE LARGER, TESTS INSTITUTED BY THE APPRO-PRINTE DESIGN GROUP VALIDATED THIS CONCLUSION.	CORRECTIVE ACTION-THERMADOR TRANSFORMERS WERE REMOVED PROM USE, PER CIC 07542, ECP 7432, DATED SEPTEMBER 16, 1863, MD TRANSFORMER P/M E7-04178 WAS SUBSTITUTED AS A REPLACEMENT.	A-99-04-4393-P DISPLACEMENT 67RO-THERNOBTAT	OFERATION. DISPLACEMENT GYRO MAD A STICKY THERMOSTAT IN MEATER CIRCUIT. FAILURE MAS CONFIANCO TED CONTACTS. CAUSE OF DISCREPANT CONTACTS WAS NOT DETERMINED.	
BYBTEN BUE BYSTEN	CORRECTIVE ACTION-6D/C	GYRO PACKAGE GYRO PACKAGE FAILURE HODE-OUT OF TOLE INED BY FAILUR" ANALYSIS.	CORRECTIVE ACTION-LARNO AUTOFILOT-SQUARE-A/B SYRO PACKAGE	FAILURE MODE-STRUCTURAL, THREE NSERTS, FAILURES MERE CONFIRMED ST PROBABLE CAUSE OF FAILURE IS CORRECTIVE ACTION-60/C REDESIGN	AUTOFICOT-SQUARE-A/B GTRO FACKAGE	FAILURE MODE-STRUCTURAL, SPIN MOTOR JECTED AT THE SAME TIME FOR CRACKED CENDURE REPEATED CYCLES OF TEMPERATUR R THE MERCHAY PROGRAM BECAUSE OF ITS OTTED FOR MEAVIER TRANSFORMEN, WHICH ED BY THE APPRO- PRIATE DESIGN GROUP	CORRECTIVE ACTION-THERMADOR AND TRANSFORMER P/N 27-04578	AUTOPILOT-SQUARE-A/B GTRO PACKAGE	FAILURE MODE-ERRATIC OPE DUE TO BURNED AND PETTED	

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CORRECTIVE ACTION-UNRIGHE. AUTORITOR ACTION-UNRIGHE. AUTORITOR ACTION-UNRIGHE. PAILURE MODE-STRUCTURAL, STROT TEST SHOULD EXCESSIVE LOADING ON PLASE A FLEXALD CAURED BHOTT. ADDITION OF MALLE SHOULD SHOU	3737EH 308-3737EH	PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 11ME DIF	PRI VENDOR HANG	ğ
ALICOTION-SAURE-AND SPACEDRING STOOD WAS A	CORRECTIVE ACTION-UM	KHOM.					2007:
FILLER WORL-ITHURIDAL, GING TEST MET SHORED EXCESSIVE LOADING ON PLATE OF 600 CPR 3-PHASE PORES SUPPLY. FAILURE OF PRAL, GING F-04250-3 CORPINED DUE TO SHOUND ENDER FILED. SHORED PHASE A PLEALED CAUSED BHOSEL. L FAILURE CONFIRMED IN HEATER CHIRCL MANETIC AMPLIFIED DE TO OPEN (ELECT) RESISTOR. CORRECTIVE ACTION-GOVE INCORPORATED NEW HANGLING FROM SHORED FOR METALLIC-FILM REDIGED FILED FOR FROM PROCEDURES AND VENOUR FROM PROCEDURES AND VENOUR FROM PROCEDURES. NEWSON OF MANETIC AMPLIFIED INCORPORATED CHAME PROD EXPOSITED-CARBON TO METALLIC-FILM REDIGED THE LANGUAGE FOR SHORED CHAME PROD EXPOSITED-CARBON TO METALLIC-FILM REDIGED THE LANGUAGE FOR SHORED	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	3P-90-04-4363-F D15PLACEMENT 67RO	FAR 27-41002-909	157D 630710		FEB KEASFOTT	805288
CORRECTIVE ACTION-GOVE INCORPORATED NEW HANGLINK REQUIREMENTS INTO GYRO PROCEDURES AND VENOR REDESIGNED BAFFLES TO REDISCUS IN CONTION-GOVER INCORPORATED CHAME PROFESSIONES AND VENOR OF WEIGHLIGHTON STATES INCORPORATED CHAME PROFESSIONES TO NETALLIC-TILK REDISCUS IN CONTIONS OF THE CIRCUIT. ANTORIOT-SAUME—AND GOVERNTE AT PRESCRIBED TINE, UNKNOMOTING OF GYRO SIGNAL CUITPUTS MERE LATE RECAUSE OF LATE SEPAR ATION OF AUTOFILLOT—SAUME—AND STATES INCORPING OF AUTOFILLOT—SAUME—AND STATES INCORPING ATION OF AUTOFILLOT—SAUME—AND STATES INCORPING ATION OF AUTOFILLOT—SAUME—AND STATES INCORPING AND AS VAC. PAILURE CONTRACTOR—NOW. CORRECTIVE ACTION—NOW. AUTOFILLOT—SAUME—AND STATES ATION OF AUTOFILLATED BETWEEN 7 AND AS VAC. PAILURE CONTRACTOR—AND RESISTANCE VALLE OF SALES OF THE ALLOWABLE CHECKED TO PREATER OUTPUT CHILLATED BETWEEN 7 AND AS VAC. PAILURE CONTRACTOR—ALLOWABLE CHECKED TO PREATER CONTROL MACHITIC AMPLIFIER. ASTME OF RESISTOR CAUSED RESISTANCE VALLE TO SHIFT MELL OUTSIDE THE ALLOWABLE CHECKED TO CERANIC. CORRECTIVE ACTION—VENORS REDESIGN THEORY OF TALLIC-FILM RESISTORS OF PRACE OF DEPOSITED CAUSED IN ALL CRITICAL POSITIONS OF THE MIGHTINE CHIRD.	FAILURE MODE-STRUCTU OF MOLL GYRO 7-04250 L FAILURE CONFIRMED I	RAL, GYRO TEST SET SHONED EXCESSIVE (1-3 CONFIRMED DUE TO SHORTED TO GROUN IN HEATER CONTROL MAGNETIC ANPLIFIER (LOADING ON PHASE A OF D FLEXLEAD. BROKEN PHI DUE TO OPEN (ELECT) RI	400 CPS 3- ISE A FLEXA.	PHASE POM	ER SUPPLY, FAILL S SHORT, ADDITIC	<u>u</u> 5
STEED FEET OF THE RESERVENCE OF THE ACTIVATION OF AUTOFILOT. FAILURE HODE-FAIL TO CHERATE AT PRESCRIBED TIME, UNKNOUNDING OF CYRO SIGNAL OUTPUTS WERE LATE BECAUSE OF LATE REPAR ATION OF AUTOFILCT. BACINET AT ONE THAT RISE, PROBABLY BROKEN LAWARD. SYSTEM EFFECT-OPERATION STARTS LATE, SLIGHTLY LATE ACTIVATION OF AUTOFILOT. VEHICLE EFFECT-OPERATION STARTS LATE, SLIGHTLY LATE ACTIVATION OF AUTOFILOT. VEHICLE EFFECT-OPERATION STARTS LATE, SLIGHTLY LATE ACTIVATION OF AUTOFILOT. VEHICLE EFFECT-OPERATION STARTS LATE, SLIGHTLY LATE ACTIVATION OF AUTOFILOT. VEHICLE EFFECT-OPERATION STARTS LATE, SLIGHTLY LATE ACTIVATION OF AUTOFILOT. VEHICLE EFFECT-OPERATION STARTS LATE, SLIGHTLY LATE ACTIVATED OF AUTOFILOT. VEHICLE EFFECT-OPERATION STARTS LATE, STARTS CONTROL NAME STARTS TO A STALT STARTS CONTROL NAME STARTS AND ASSISTANCE OF ALLURE HOSE-OUT OF TOZERANCH. FIRE MATERIA CONTROL NAME STARTS CONTROL NAME STARTS CONTROL NAME STARTS CONTROL NAME STARTS CANSON IN ALL CRITICAL POSITIONS OF THE WASHETT CAMPLIFIER CIRCUIT. COMMECTIVE ACTION-VENOON REDESTER INCOMPANYED METALLIC-FILM RESISTORS IN PLACE OF DEPOSITED CANBON IN ALL CRITICAL POSITIONS OF THE WASHETT CAMPLIFIER CIRCUIT.	CORRECTIVE ACTION-60 REDUCE FLEXLEAD FAIL ESISTORS IN CRITICAL	I'C INCORPORATED NEW HANDLING REGUIRE . URES. NEXDOR OF MACHETIC ANTLIFIER IN POSITIONS OF THE CIRCUIT.	MENTS INTO GYRO PROCEI MCGRORATED CHANGE PR	JURES AND V	ENDOR RED	ESIGNED BAFFLES TO METALLIC-FILM	0 ≈
FAILURE MODE-FAIL TO GREATE AT PRESCRIBED TIME, UMGNOUNDING OF GIND SIGNAL CUTPUTS MERE LATE RECAUSE OF LATE SEPAR ATION OF AUTOFILG" UMBILICAL, SHOULD EJECT AT OME THEN RISE, PROBABLY BROKEN LANYARD. SYSTEM EFFECT-MOME CORRECTIVE ACTION-NOME CORRECTIVE ACTION-NOME AMPLIFIER-RESISTOR AND PACKAGE FAR ROTES BETWEEN 7 AND 43 VAC. FAILURE CONTINEED DUE TO F AILURE MODELS THE ALLOWABLE CHEMENT TOLENANCE. COMMECTIVE ACTION-WENCON REDESIGN INCOMPONING METALLIC-FILM RESISTONS IN PLACE OF DEPOSITED CARBON IN ALL CRITICAL POSITIONS OF THE WIGHETIC AMPLIFIER CIRCUIT.	AUTOFILOT-SQUARE-A/B	. 60/A83-0476/C1-503-00-69	r.ien	Ş		6.8	1
SYSTEM EFFECT-MONE CORRECTIVE ACTION-MONE CORRECTIVE ACTION-MONE AUTHORICO-SQUARE-A/B SP-80-D4-A387-F FAR 2010 WIR YES MANKETIC CONTR AUTHORICO-SQUARE-A/B SP-80-D4-A387-F FAR 2010 WIR YES MANKETIC CONTR FAILURE MODE-OUT OF TOCERANCL, PITCH FINE MEATER OUTPUT OSCILLATED BETWEEN 7 AND 43 VAC. FAILURE CONFINED DUE TO F AILED RESISTOR R-14 IN PEEDBACK CIRCUIT OF MEATER CONTROL MACMETIC ANMINIER. A6!NG OF RESISTON CAUSED RESISTANCE VA LUE TO SMITT MELL OUTSIDE THE ALLOMBLE ONE-PERCENT TOLERANCE. COURECTIVE ACTION-VENDOR REDESIGN INCORDANTED METALLIC-FILM RESISTONS IN PLACE OF DEPOSITED CARBON IN ALL CRITICAL POSITIONS OF THE MACMETIC ANALIFIER CIRCUIT.		OPERATE AT PRESCRIBED TIME, UMGROUM BILICAL, SHOULD EJECT AT ONE INCH RI	DING OF GYRO SIGNAL ON SE. PROBABLY BROKEN LA	JTPUTS MERE INYARD.	14TE BEC	AUSE OF LATE BEP	<u> </u>
VEHICLE EFFECT-MONE CORRECTIVE ACTION-MONE AMPLIFIER-RESISTOR AMPLIFIER-RESISTOR E778 E010 WIR YES HAGNETIC CONTR AMPLIFIER-RESISTOR FAILURE HODE-OUT OF TOLERANCE, PITCH FINE HEATER OUTPUT OSCILLATED BETWEEN 7 AND 48 VAC. FAILURE CONTRNED DUE TO F AILED RESISTOR R-14 IN PEEDSACK CIRCUIT OF HEATER CONTROL MACHETIC AMPLIFIER. ASING OF RESISTOR CAUSED RESISTANCE VA ALLO BHIFT HELL OUTSIDE THE ALLOMBLE CHE-PERCENT YOLENANCE. CORRECTIVE ACTION-VEHOOR REDESIGN INCOMPONATED METALLIC-FILM RESISTORS IN PLACE OF DEPOSITED CARBON IN ALL CRITICAL POSITIONS OF THE MACHETIC AMPLIFIER CIRCUIT.	SYSTEM EFFECT-OPERAT	ION STARTS LATE. SLIGHTLY LATE ACTIV	AYION OF AUTOPILOT.				
CORRECTIVE ACTION-MORE. ANTIFIER AMERIC CONTR FAR 2010 WIR YES MACHETIC CONTR GYPO PACKAGE AMPLIFIER-RESISTOR E7-72585-1 630628 NO OLS FAILURE HODE-OUT OF TOLERANCL, PITCH FINE HEATER OUTPUT OSCILLATED BETWEEN 7 AND 43 VAC. FAILURE CONFIRMED DUE TO F AILED RESISTOR R-14 IN FEEDBACK CIRCUIT OF HEATER CONTROL NACHETIC AMPLIFIER. ACTION OF RESISTOR CAUSED RESISTANCE VA LUE TO SMIFT HELL OUTSIDE THE ALLOMBLE CANE-PERCENT TOLERANCE. CORRECTIVE ACTION-VENDOR REDESIGN INCOMPORATED METALLIC-FILM RESISTORS IN PLACE OF DEPOSITED CARBON IN ALL CRITICAL POSITIONS OF THE MACHETIC AMPLIFIER CIRCUIT.	VEHICLE EFFECT-NONE	•					
CYRO PACKAUE AMPLIFIER-RESISTOR FAILURE HODE-OUT OF TOCERANCE, PITCH FINE HEATER OUTPUT OSCILLATED BETWEEN 7 AND 43 VAC. FAILURE CONFIRMED DUE TO F AILED RESISTOR R-14 IN FEEDBACK CIRCUIT OF HEATER CONTROL NACHETIC AMPLIFIER. A FIME OF RESISTOR CAUSED RESISTANCE VA LUE TO SHIFT MELL OUTSIDE THE ALLOMABLE ONE-PERCENT YOLKANGE. CURRECTIVE ACTION-VENDOR REDESIGN INCORPORATED METALLIC-FILM RESISTORS IN PLACE OF DEPOSITED CARBON IN ALL CRITICAL POSITIONS OF THE MACHETIC AMPLIFIER CIRCUIT.	CORRECTIVE ACTION-NO		5 A B			FES HAGNETIC CON	
FAILURE MODE-OUT ALLE TO SMIFT MELL CORRECTIVE ACTION POSITIONS OF THE	GYRO PACKAGE	AMPLIFIER-RESISTOR	1 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -			8 D	
	FAILURE MODE-OUT OF AILED RESISTOR R-14 I LUE TO SMIFT MELL OUT	TOLERANCE, PLTCH FINE HEATER OUTPUT (N PEEDBACK CIRCULT OF HEATER CONTROL BIDE THE ALLOMBLE CHE-PERCENT TOLER	OBCILLATED BETWEEN 7 / MACWETIC AMPLIFIER, / ANCE,	IND 45 VAC.	FAILURE .	CONFIRMED DUE TO USED RESISTANCE	ĸą
		NDOR REDESIGN INCORPORATED METALLIC-I NETIC AMPLIFIER CIRCUIT.	FILM REBISTORS IN PLAC	E OF DEPOS	TED CARB	M IN ALL CRITIC	

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

37.87EH 346-3737EH	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIP TIME DIP	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	2F-68-04-4367-F	FAR E7-4500E-898	1970 ETR 630627	7£8 60/C NO	•
FAILURE MODE-ERRATIC OPERATION. ST PROBABLE CAUSE OF FAILURE WAS	IC OPERATION. INTERHITTENT SHED DROPOUT DURING TEST. FAILURE NOT CONFIRMED IN EXTENSIVE TESTS. MO F FAILURE WAS TEST SET MALFUNCTION.	DURING TEST. FAILUR	E NOT CONFIRMED IN	EXTENSIVE TESTS. MO	
CORRECTIVE ACTION-6D/C	6D/C REVALIDATED SITE TEST GOUIPMENT BUT MS DISCREPANCIES WERE DISCOVERED.	HO DISCREPANCIES W	ERE DISCOVERED.	de la company de la compa	
AUTOFILOT - SQUARE - A/B	37-99-04-4304-F	FAR R7-43189-3	\$30425 FACTORY	7£3 50/C NO	****
FAILURE NODE-FAIL TO OF ER POTTING, FAILURE NOT	TO OPERATE AT PRESCRIBED TIME, NO OUTPUT FROM SHRD SUBASSEMBLY I DURING FIRST ELECTRICAL TEST AFT NOT CONFIRMED BY EXTENSIVE TESTING, MOST PROBABLE CAUSE OF FAILURE IS TEST EQUIPMENT MALFUNCTION	PROH BHID SUBABEH IT PROBABLE CAUSE OF	SLY I DURING FIRST FAILURE IS TEST EG	ELECTRICAL TEST AFT IUFPIENT MALFUNCTION	
CORRECTIVE ACTION-FACTO	FACTORY PERSONNEL INFORMED OF REBULTS OF ANALYSIS. NO FURTHER ACTION WAS TAKEN SINCE REPORTED FAI	. AMLTBIS. NO FURTH	ER ACTION MAS TAKEN	I BINCE REPORTED FAI	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-93-04-4368-F AHPLIFIER-SHRD	FAR 87-45185-3	450622 FACTORY	YES 40/C HO	992332
FAILURE MODE-OUT OF TOL B DUE TO INTERNITIENT CO	FAILURE MODE-OUT OF TOLERANCE. MO OUTPUT PROM SHAD SHBASSEMBLY I DURING FINAL ELECTRICAL TEST. FAILURE WAS CONFIRME D DUC TO INTERMITTENT CONDITION IN SIGNAL INPUT CIRCUIT. MOST PROBABLE CAUSE OF FAILURE WAS INADVERTENT APPLICATION OF HIGH VOLTAGE TO TEST INPUT THROUGH HUMAN ERROR.	HOLY 1 DURING FINAL MT PROBABLE CAUSE OF	ELECTRICAL TEST. F FAILURE WAS IMADA	AILURE MAS CONFIRME ERTENT APPLICATION	
CORRECTIVE ACTION NOME.	, SINCE FAILURE AMALYSIS WAS INCONCLUSIVE AS TO CAUSE OF PAILURE.	USIVE AS TO CAUSE OF	' FAILURE.	,	
AUTOFILGT-SQUARE-A/B GTRO PACKAGE	36-99-04-4399-F RATE CYRO	FAR 27-04574-3	630621 FACTORY	YES HOMETHELL NO	*0526
FAILURE MODE-CONTAMINAT B COMFISHED DUE TO INTER ELDUF AND UNCLEAN ASSEME	FAILURE MODE-CONTAHTMATION. GYRO EXHIBITED IN-PHASE MULL OF 17.53 MY MHERE 13.0 MY IS MAKIMUM ALLOMABLE. FAILURE MA 8 COMFISHED DUE TO INTERNAL CONTAMINATION AND/OR MISHANDLING. CONTAMINATION MOST PROBABLY RESULTED FROM OXIDATION BU ILDUP AND UNCLEAN ASSEMBLY FACILITIES.	F 17.53 HV WHERE 13. FG. CONTABINATION NO.	O MY IS MAKINUM AL Ny probably resulte	LOMBLE, FAILURE IN D FROM OXIDATION BU	
CORRECTIVE ACTION-6D/C 11ME, VENDOR STATED THAT 10M CONTAMINATION.	CORRECTIVE ACTION-60/C REVISUED VENDOR CLEAN ROOM FACILITIES AND FOUND THEM RECENTLY IMPROVED AND ADEQUATE AT THIS IME, VENDOR STATED THAT NEW IMDUCTION SOLDERING TECHNIQUES EMPLOYED IN ASSEMBLY MINIMIZED THE POSSIBILITY OF OXIDA OM CONTANINATIOM.	ES AND POUND THEM RI EMPLOYED IN ASSENDI	CCENTLY IMPROVED AN. Y MINIMIZED THE PO	AND ADEQUATE AT THIS POSSIBILITY OF OXIDAT	
				PAGE 0356	

SENERAL DYNAMICS CONVAIR DIVISION

10 JUN 1060	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	¥		٢
NATER SUB-BYBTER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE PRI DATE DIF TIME DIF OTH	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	SF-88-04-4383-F SFRD CIRCUIT BOARD	7 A N R 7 - 4 S E 5 O - 8 O 1	SSDSIS FACTORY	YES 60/C	***************************************
FAILURE MODE-ERRATIC OPERATION FAILURE ANALYSIS PERFOPMED USIN CPREPAMT CALISRATION RESISTORS.	FAILURE MODE-ERRATIC OPERATION, BOARD WAS REJECTED BECAUSE OF HEAT-SENSITIVE OPERA, JOH. FAILURE WAS MOT CONTRINED (FAILURE ANALYSIS PERFORMED USING SUBSTITUTE CALIBRATING REBISTORS), REPORTED FAILURE WAS MOST PROBABLY CAUSED BY DIS CPREPANT CALIBRATION RESISTORS.	SE OF HEAT-SENSITIVE C ESISTONS). REPORTED PA	PERALION. PAILURE ILURE MIS MOST PRO	PAILURE MAS MOT COMPIRMED (MOST PROBABLY CAUSED BY DIS	~ .
CORRECTIVE ACTION-GD/C ISK OF SHRD BOARD FAILUR	ACTION-GD/C REVISED CIRCUIT BOARD CALIBRATION PROCEDURE CLARIFYING THE CALIBRATION PROCESS SO THAT THE BOARD FAILURE CAUSED BY INCORRECT CALIBRATION RESISTORS WAS MIMIMIZED.	PROCEDURE CLARIFYING RESISTORS WAS MINIMIS	THE CALIBRATION PR	OCESS SO THAT THE R	
AUTOFILOT-SQUARL A/B	3P-99-04-4361-F AMPLIFIEK-RE918TOR	FAR 27-41330-635	EDSD FACTORY	YES MACHETIC CONTR. NO OLS	125240
AILURE HODE-FAIL DURI OVERHEAT, FAILURE NA	FAILURE HODE-FAIL DURING OPERATION, PROPORTIONAL MEATER-CONTRCL MUCKETIC ANMLIFIER FAILED AND ALLON TO OVERHEAT, FAILURE WAS CONFIRMED DUE TO HEAT BENSITINE DEPOSITED-CARBON FEEDBACK RESIBTOR (R-14).	CONTRCL MACHETIC AMPLI DEPOSITED-CARBON FEEDS	FIER FAILED AND AL ACK RESISTOR (R-14	AMPLIFIER FAILED AND ALLOWED THE YAN GYRO FEEDBACK RESIBTOR (R-14).	
ORRECTIVE ACTION-VEND	CORRECTIVE ACTION-VENDOR REDESIGN INCORPORATED METALLIG-FILM RESISTORS IN PLACE OF DEPOSITEM-CARBON IN ALL CRITICAL POSITIONS OF THE NAUNETIC AND IFIER CIRCUIT.	FILM RESISTORS IN PLAC	E OF DEPOSITEM-CAR	BON IN ALL CRITICAL	
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	3P-99-04-4386-F D13PLACEMENT 6780-34RD	FAH 7-04250-003	630614 FACTORY	YES KEARFOTT NO C7025060379	982310
FAILURE MODE-OUT OF TO T CAUSE OF FAILURE MOT	TOLERANCE. DURING GYRO PACKAGE TEBTB GYRO HAD LOM BHYD OUTPUT VOLTAGE, FAILURE NAS CONFIRNED BJ Dy determined by Failure Amalybib.	GYRO HAD LON BIMED OUT	PUT VOLTAGE. PAILL	RE WAS CONFIRMED BY	
CORRECTIVE ACTION-LIMEN	NOW, SHED CIRCUIT REDESIGNED.				
AUTOPILOT SAUARE-A/B GTRO PACKASE	A-88-04-4588-F	FAR R7-D4574-5	830613 FACTORY	YES HOMETHELL NO JRS101AZ	• • • • • • • • • • • • • • • • • • • •
FAILURE MOSE-CUT OF TO OR CALIBRATION.	TOLERANCE, GYRO EINIBITED LOW TORBUING BENBITIVITY. FAILURE WAS CONFIRMED DUE TO INCORRECT VEND	NG BENBITIVITY. FAILU	E MAS CONFIRMED DI	R TO INCORRECT VEN	
CORRECTIVE ACTION-62/C	CORRECTIVE ACTION-63/C AND VENDOR INVESTIGATED POSSIBLE TESTING DISCREPANCIES BY COMPARING TEST DATA OF SEVERAL GYR 4. REVIEW OF 60/C AND VENDOR DATA AND TEST PROCEDURES REVEALED NO APPARENT TESTING DISCREPANCIES.	TCGTING DISCREPANCIES VEALED NO AFFARENT TEL	BY COMPARING TEST	DATA OF SEVERAL 671	1
Librardo amingo difficulta aperiorista e - e man difficulta amino documento es-	demokratika programa i demokratika i programa i demokratika i programa i programa i programa i programa i demokratika i programa i programa i demokratika i programa	and the second s		PAGE 0330	_

GENERAL DYNAMICS CONVAIR DIVISION

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	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	CPILOT SYSTEM-AIRBOR	벟			
\$7\$7EH \$40-2787EH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	SITE P	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B GTRO PACRAGE	NZ-89-04-4336-C CIRCUIT BOARD	FAR 7-04250-603	630613	FACTORY	YES 60/C NO	** 1670
FAILURE MODE-ERRATIC OPERA FAILURE COMPTRNED IN SIGNAL	FAILURE MODE-ERRATIC OPERATION, GYRO REJECTED IN FACTORY CHECKOUT WHEN EMITTER FOLLOWER OUTPUT VARIED ERRATICALLY. AILURE COMPIRMED IN BIGMAL AMPLIFIER CIRCUIT BOARD, FAILURE AMALYBIB NOT COMDUCTED.	HECKOUT WHEN EMITTER E AMELYBIB NOT COMDU	FOLLOWER CTED.	WTPUT VAR	IED ERRATICALLY.	
CORRECTIVE ACTION-NOME,	SINCE CAUSE OF FAILURE WAS NOT FOUND.	ġ				
AUTOFILOT-SAURE-A/B GTRO PACKAGE	SP-59-04-4344-F CIRCUIT BOARD SPRD	FAR 27-43165-3	630613	FACTORY	YES 60/C NO	99166
FAILURE MODE-FAIL DURING OFFRATION. SHRD DIODES CR-1 AND CR-E BURNED OFEN AND CAPAC OF EXCESSIVE WOLTAGE THROUGH HUMAN ERROR.	FAILURE MODE-FAIL DURING OPERATION. SHRD SUBASSEMBLY I FAILED DURING ELECTRICAL TEST, FAILURE HAS CONFIRMED DUE TO NODES CR-1 AND CR-2 BURNED OPEN AND CAPACITOR C-1 SHORT-CIRCUITED, MOST PROBABLE CAUSE OF FAILURE IS MISAPPLICATION OF EXCESSIVE WOLTAGE THROUGH HUMAN ERROR.	LED DURING ELECTRICA RCUITED. MOST PROBAB	L TEST. FA LE CAUSE O	LURE MAS F FAILURE	CONFIRMED DUE TO	
CORRECTIVE ACTION-FACTO	CORRECTIVE ACTION-FACTORY TEST EQUIPMENT AND PROCEDURES WERE REVIEWED AND FOUND ADEQUATE.	RE REVIEWED AND FOUN	D ADEAUATE			
AUTOFILOT-SAUME-A/B	NZ-99-04-4310-F CIRCUIT BOARD SHRD	FAR 27-43229-3	1665	FACTORY	YES GD/C NO	092100
FAILURE MODE-ELECTRICAL OPE NT ELECTRICAL OPEN. CAUSE OF IBBON.	FAILURE MODE-ELECTRICAL OPEN, DURING VIBRATION TESTS A SHRD NO-GO WAS RECEIVED, FAILURE CONFIRMED DUE TO INTERHITTE IT ELECTRICAL OPEN. CAUSE OF FAILURE WAS POOR WELD BETWEEN OUTPUT PIN 5 OF SUBASSENBLY 1 IN CHANNEL 3 AND THE HELD R BBON.	D NO-GO WAS RECEIVED OUTPUT PIN S OF SUBA	. FAILURE SSEMBLY 1	CONFIRMED IN CHANNEL	DUE TO INTERHITTE 3 AND THE HELD R	
CORRECTIVE ACTION- 60/C WELLEN BREAKAGE STRENGTH OF EACH INVESTIGATION AND EFFORT TO	D PROCESS SCHEDULES AND GC 1 WELD AS REQUIRED DY MANUFAC IMPROVE THE RELIABILITY OF	FESTS WERE REVIEWED AND FOUND ADEQUATE, THE EIGHT-POUNG WINI TURING PROCESS SPECIFICATION WAS CONSIDERED SUFFICIENT, 6D/ MELDS IS CONTINUING, DESIGN MODIFIED TO ALLOW BETTER WELDS,	FOUND ADEG ATION WAS SIGN HODIF	UATE, THE CONSIDEREI IED TO ALI	EIGHT-POUG MINIM SUFFICIENT, GD/C	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	8F-99-04-4347-F SARD CAFACITOR	FAR 27-43229-5	630610	FACTORY	5/95	991381
FAILURE HODE-OUT OF TOLERANCE. RMED DUE TO HROME VALUES OF CAPA	EDANCE, SHED CIRCUIT BCARD HAD INTERHITTENT OUTPUT DURING ELECTRICAL TEST, FAILURE WAS COMFI OF CAPACITORS C-3; C-4 AND C-5, FAILURE CAUSED BY INCORRECT ASSEMBLY.	RMITTENT CUTPUT DURI	NG ELECTRI ARECT ASSE	CAL TEST. MBLY.	FAILURE WAS CONFI	
CORRECTIVE ACTION-60/C REVI	revibed abbendly technique by incorporating part rits for shrd bubarbenblies in Lot Control.	PORATING PART RITE	ON SHRD BL	BASSEMBL I	IN LOT CONTROL	
					PACE 0340	

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GENERAL DYNAMICE CONYAIR BIVISION

	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TOPILOT STREM-AIRBOM	2					
AYATEM AU&-AYATEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE	11E DIF	1 2 2	PRI VENDOR NAME OTH VENDOR PART NO		
AUTOFILOT-SQUARE-AZB BTRO PACKASE	AM83-0003-128D/FC-CO-01-0302-003	COMPOST TE-PACTORY	1260	FACTORY	88			
FAILURE HORE-BRIFT, WE WE ME ME ME CTED BY YOUT CHA	. VERNIER NO. 1 PITCH/ROLL PEEDBACK VOLTAGE MONITORED ON BANBORN RECORDER CHAMMEL S INDICATED AN CHAMME IN LEVEL. THE PROBLEM MAS CAUSED BY A SPOREN MISE MAICH CONNECTS PSIA TO THE AGE ROLL STR.	AGE HON! TORED ON BAN BY A SHOREN WINE WI	BORN RECOR	DER CHAM	10 F	INDICATED AN		1
BYBTEH EFFECT-INFROPER ANALOG BIGNALS.	ANALOG BIGNALS.							
WEHICLE EFFECT-COMPOSI	WENICLE EFFECT-COMPOSITE DELATED. POST-COMPOSITE TESTING REQUIRED.	EQUIAED.						
CORRECTIVE ACTION-REPAIRED DAMAGED HARNESS.	IRED DAMAGED HARNESS.						·	
AUTOPILOT-SQUARE-A/B	8F-90-04-4294F	FAR E7-4100E-931	430404	FACTORY	3 3		•• 3043	
FAILURE MODE-OUT OF TO CANNISTER MAS ORIGINALL' MAS IN SPECIFICATION.	FAILURE MODE-OUT OF TOLERANCE. ROLL SLAVING INDICATION WAS LOM DURING CONFIDENCE TEST ON TEST SET TETSORS-003. THE CANNISTER WAS ORIGINALLY CALIBRATED ON TETSORS-004. WHEN THE CANNISTER WAS RETESTED ON TETSORS-004. THE ROLL SLAVING WAS IN SPECIFICATION. THE PAILURE INDICATION ON TETSORS-003 WAS CAUSED BY A TEST SET MALFUNCTION.	LOM DURING CONTIDENC CANNISTER WAS RETES WAS CAUSED BY A TES	E TEST ON TED ON TEST T SET MALE	TEST SET 3065-004 UNCTION.	. ž.	D65-003, THE ROLL SLAVING		
CORRECTIVE ACTION-NOME.								
UTOPILOT~SQUARE~A/B	34-80-04-4328-F RATE GTRO	FAR 27-41703-809	1390 63063	LTR	7. CS	YES HONEYMELL NO	000140	
FAILURE MODE-FAIL DURIN URE COMFIRMED DUE TO INT	FAILURE MOE-FAIL DURING OPERATION. PITCH R/TE GYRO (27-04574-3) EXHIBITED NO SHAD CUTPUT DURING SYSTEM TESTS, FAIL NRE CONFIRNED DUE TO INTERNAL DANAGE RESULTING FROM LEARY COMER SOLDER SEAN,	74-3) EDHIBITED NO SIYER BOLDER SEAN,	AD CUTPUT	DUM 1 NG 1	IYSTE!	1 TESTS, FAIL		
CORRECTIVE ACTION-VEHOOR ALENTED FINDALS WITH HELIUM LEAK DETECTOR. FORCES WILL BE IDENTIFIED BY DABM	CORRECTIVE ACTION-VENDOR ALERTED PRODUCTION AND GC PERSONNEL TO FAILURE. VENDOR INITIATED 100-PERCENT LEAR TEST OF STROALS WITH HELIUM LEAK DETECTOR. GD/C AND VENDOR DEVELONED NEW TECHNIQUES TO IMPROVE QUALITY OF SOLDER SEAMS. THES GYROS WILL BE IDENTIFIED BY DASH MINIBER CHANGE (-5).	. TO FAILURE, VENDOR NEW TECHNIQUES TO IS	INITIATED PROVE BUAL	100-PERC	ENT L	EAK TEST OF SEAMS. THES		
ITOPILOT-SQUARE-A/B	3P-80-04-4317-F DISPLACEMENT 67RO	FAR 1 87-41608-913	1390 MR		8 5		*****	
Failuré moe-fail during off Acénent Stro Fackage has re, Abes-F. For Primary Pailure,	FAILUNE MOE-FAIL DURING OPERATION. DURING SYSTEM CHECKS A SHED NO-GO OCCURRED IN REMOTE RATE GYRO PACKAGE AND DISP ACEMENT STRO FACKAGE HAS REJECTED AS PART OF MATCHED SET. NO FAILURE IN DISPLACEMENT SYRO PACKAGE. SEE FAR SP-3D-DA ASES-F. FOR PRIMARY FAILURE.	ME NO-GO OCCURRED I PAILURE IN DIBPLACE	N REMOTE M	ATE GYRO PACKAGE.	PACK	ACC AND DISP FAR 8P-80-04		
CORRECTIVE ACTION-NOWE R	REGULACD.							
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	DIFFICULTIES REVIEW-	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	Ä		
3787EM \$U8-\$787EM	TEST/REPORT MUMBER FAILED COMPONENT NAME	DIP DATA SOUNCE PART NUMBER	VEHICLE SITE DATE DIF TIME DI	SITE PRI VENDOR NAME	٥١
AUTOPILOT-SQUARE-A/B	SP-88-D4-A338-P	FAR 27-43186-3	630605 FACTORY	7 YES 60/C	******
FAILURE MODE-ELECTRICAL E PIN HOLDING ONE SIDE OF	IRICAL OPEN. BHRD SUBASSEMBLY & HAD NO OUTPUT, FAILURE CONFIRMED DUE TO POOR MELD JOINT BETHEEN TH SIDE OF CALIBRATION RESISTOR AND WELD RIBBON.	OUTPUT, FAILURE CONFII	INED DUE TO POOR 1	ACLD JOINT BETHEEN T	-
CORRECTIVE ACTION-6D/ H BREAKAGE STRENGTH OF VESTIGATION AND EFFORT	CORECTIVE ACTION-GD/C WELD PROCESS SCHEDULES AND GC TESTS WERE REVIEWED AND FOUND ADEGUATE. THE EIGHT-FOUND HINIMU H brearage strength of each meld as required by Hammfacturing Process specification was considered adeguate. GD/C in Vestigation and effort to improve the Reliability of Welds is continuing.	ITS WERE REVIEWED AND I MING PROCESS SPECIFICA IS IS CONTINUING.	YOUND ABEQUATE. THISTORY WAS CONSIDER	4E EIGHT-POUMD HINIK NED ADEQUATE, 60/C I	3.7
AUTOPILOT-SQUARE-A/B	3F-89-04-4338-F	FAR R7-45186-3	SSDSDS FACTORY	7 YES 60/C	:
FAILURE MODE-GUT OF T LYZED AND CAUSE OF PAI	FAILURE HODE-OUT OF TOLENANCE. SHED SUBASSENBLY HAD EXCESSIVE OUTPUT FROM FULL MAVE RECTIFIER. UNIT HOT FAILURE AMA .YZED AND CAUSE OF PAILURE HOT DETERMINED.	ISSIVE CUIPUT FROM FULL	. MAYE RECTIFIER.	UNIT NOT FAILURE AN	
CORRECTIVE ACTION-NOME.	C. CAUSE OF FAILURE NOT KNOWN.				
AUTOFILOT-SQUARE-A/B	SP-99-04-4355-F FILTER-ELECTRICAL	FAR 27-04948-3	630331 FACTORY	7 YES ACT NO 3024	* ON & & &
FALURE NODE-OUT OF T F. FALURE MAS CONTIN TRINGENT CUTOFF REGUIR	FAILURE MODE-OUT OF TOLERANCE. FOUR BANDFASS FILIENS FAILED WITH OUTPUT WOLTAGE TOO HIGH AT THE LOM-FREGUENCY CUTOF F. FAILURE MAS COMFINED ON FOUR UNITS DUE TO OUT OF SPECIFICATION CUTOFF. FAILURES RESULTED FROM ADDITION OF MORE S TRINGENT CUTOFF REQUISEMENTS TO INCREASE SARD RELIABILITY.	ILED WITH CUTPUT WOLTAN SIFICATION CUTOFF. FAIN F:	HE TOO HIGH AT THE	E LON-FREQUENCY CUTO ON ADDITION OF WORE	
CORRECTIVE ACTION-60/C	'C RETESTED ALL FILIERS RECEIVED BEFORE FEBRUARY 1963 WHICH WERE STILL IN STOCK OR NEXT ASSEMBL. 37 NEETING NEW HORE STRINGENT CUTOFF REQUIRENENTS WERE REHOVED FROM STOCK.	TORE FEBRUARY 1963 5411	CH NERE STILL IN SOVED FROM STOCK.	STOCK OR NEKT ASSEN	
AUTOFILOT-SQUARE-A/B	SP-99-D4-4343-F CIRCUIT BOARD AMED	FAR 27-43833-803	6305gg FACTORY	r ves 66/c	:
FAILURE MODE-OUT OF T DUE TO OBCILLATORY MA	FAILURE MODE-OUT OF TOLERANCE, SHED MODULE OUTPUT THBUFFICIENT TO INDICATE SHED-GO CONDITION, FAILURE MAS CONFIRMED Due to oscillatory nature of shaassembly, Failure caused by Calibration Procedures of New Circuit.	FICIENT TO INDICATE BM	10-50 CONDITION. I	FAILURE MAS CONFIRMS	<u> </u>
CORRECTIVE ACTION-60/ PACTORY.	60/C 1881#15 NEW ERUTPHENT OPITATING PROCEDURE FOR CALIBRATION AND INSTALLED NEW BHRD TERT SET IN	TOCEDUME FOR CALIBRATIO	M AND INSTALLED	MEW SHAD TEST SET 19	
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	691323				631677	,	# 25 S	
VENDOR NAME VENDOR PART NO		URE AMALYSIS. MOMEY	60/C ED VOLTAGE MAS NO TEST SET.	NOICATES A FAIL REJECTING PART	YES 60/C NO	ATION. FAILURE CONSTRUCTION TH MASA-APPROVE	YES 60/C HO FAILURE HOT DETERH	PAGE DS48
# 5 # 5	ž g	741C	YES HO TIFTE N SHR	# 8 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ភ្ជី ទី	MS III	2 g	
SITE PRI TIME DIF OTH	FACTORY	D BY FAIL	FACTORY	-IF PATTE HORE BEF EST WOLTA	FACTORY	DAMAGED I	FACTORY CAUSE OF	
VEHICLE DATE DIF	630527	DETERNING S DETERNING	630327 S OF FULL	OING NOTE	430524	REPENTS F	CONTINED.	
DIF DATA BOUNCE PART NUMBER	FAR 87-04974-3	NED. EXACT CAUSE NOT NED. EXACT CAUSE NOT TERHINE EXACT CAUSE O	FAR E7-43188-3 ED TIME BETWEEN PULSE SLY CAUSED BY INCORRE	CKOUT PROCEDURE BY AD INSURE VOLTAGE 19 10	7.A.R. W.TA.W.W.T.	ION WEN SEVERAL LEAD DULE TIGHTENING REGUI ION AND INSPECTION PE	FAR ET-48188-8 SUTPUT. PAILURE WAS C	T WAS NOT FOUND.
TEST/REPORT NUMBER FAILED COMPONENT NAME	A-89-04-4345-F RATE 67RO 94RD	FAILURE MODE-ELECTRICAL OPEN, DURING ELECTRICAL CHECK GYRO DID NOT COME UP TO RUMNIMG SPEED, IN FAILURE AMALYSIS SM AD WINDING OPEN-CIRCUITED AND NAS POUND TO BE SLIGHTLY BURNED, EXACT CAUSE NOT DETERMINED BY FAILURE AMALYSIS, HOMEY WELL GYROS, CORRECTIVE ACTION-MOME, SINCE FAILURE AMALYSIS DID NOT DETERMINE EXACT CAUSE OF PAILURE.	UTOPILOT-SQUARE-A/B A-99-04-4349-F FAR 6505E7 FACTORY YES 60/C YRO PACKAGE SARD NO RO PACKAGE SARD NO RO PACKAGE SARD NO RO PACKAGE SARD NO ROBERTER THAN ORE-HALF OF A PACSE WIDTH, FAILURE MOST PROSABLY CAUSED BY INCORRECT INPUT VOLTAGE IN SHRO IEST SET-	CORRECTIVE ACTION-FAILURE NOT CONFIRMED, 60/C REVISED CHECKOUT PROCEDURE BY ADDING NOTE-IF PATTERN INDICATES A FAIL RE COMMECT CACILLOSCOPE TO TTE 269,43 OUTPUT TERMINAL AND INSURE VOLTAGE 13 10 V P-P OR MORE BEFORE REJECTING PART MOER TEST. THIS CHANGE WILL ELINIMATE REJECTIONS OF BUBASSEMELIES DUE TO INSURFICIENT TEST VOLTAGE.	47-40-64-4032-9	FAILURE MODE-STRUCTURAL. 6YRO HARNESS TRAY FAILED INSPECTION WHEN SEVERAL LEADS SHOWED DAMSED INSULATION. FAILURE COMPIRMED DUE TO IMPROPER ASSEMBLY TECHNIQUES. COMFECTIVE ACTION-60/C REVISED MANUFACTURING PROCESS SCHEDULE TIGHTENING REQUIREMENTS FOR TRAY WIRING CONSTRUCTION AND INSTALLATION. ADDITIONAL TRAINING WAS SIVEN TO PRODUCTION AND INSPECTION PERSONNEL. COMPLIANCE WITH MASS-APPROVE	CIRCUIT BOARD SHEADSEALY 1 HAD NO OUTPUT. PAILURE WAS CONTINED. CAUSE OF FAILURE NOT DETERM	NOME, SINCE CAUSE OF SUBASSENSLY PAILURE WAS NOT FOUND.
STATES \$U\$-SYSTEM	AUTOFILOT-SQUARE-A/B GTRO PACRACE	FAILURE MODE-ELECTRICAL TO WINDING OMEN-CIRCUITEE WELL GTROS. CORRECTIVE ACTION-MOME,	AUTOFILOT-SQUARE-A/B GYRO PACKAGE FAILURE MODE-OUT OF TOLI GREATER THAN ONE-HALF OF	CORRECTIVE ACTION-FAILUURE CONNECT OSCILLOSCOPE	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-STRUCTURAL, GYRO HARNESS TRAY FA CONFIRMED DUE TO IMPROPER ASSEMBLY TECHNIGUES. CORECTIVE ACTICM-60/C REVISED MANUFACTURING AND INSTALLATION. ADDITIONAL TRAINING MAS SINC.	D SOLDERING PERMISSION WE ENTABLED. AUTOFILOT-SQUARE-A/B DF-89-04-434 GYRO PACKAGE CIRCUIT BOAR FAILURE MODE-OUT OF TOLERANCE. SHED B	

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11 mor 11	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	WILOT SYSTEM-AIRBOR			
4747EN 815-8747EN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE SITE DATE DATE DATE DIF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOPILOT-SQUARE-A/B	A-08-04-4313-F RATE 6780	/AR 27-04874-8	630520 FACTORY	YES HONEYMELL NO JRSIDIAR	1.002.00
FAILUME MODE-OUT OF TOLE LE. MOST PROBABLE CAUSE	FAILUME MODE-OUT OF YOLERANCE. 6THO MULL MEASUMED HIGH. FAILUME AMALYSIS INCOMPLETE AS RATE 6THO PACKAGE NOT AVAILA Ble. Most probable cause of Failume was circuitry extermal to rate 67RO.	LUNE ANALYBIB INCOM TO RATE GYRO.	PLETE AS RATE GYRO	PACKAGE NOT AVAILA	
CORRECTIVE ACTION-NONE.	FAILURE NOT VERIFIED OH GYRO AND FAILURE AMALYBIB INCOMPLETE.	NILURE AMALYBIB INCO	HPLETE.		
AUTOFILOT-SQUARE-A/B SYNO PACKASE	NZ-89-04-4342-F CIRCUIT BOARD SHRD	FAR 27-43186-3	630514 FACTORY	NO 60/C	3
FAILURE HODE-OUT OF SPEC RH. FAILURE HOT CONFIRME	FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE, SHED SUBASSEMBLY HAD OUT ORM, FAILURE NOT CONFIRMED, FAILURE DUE TO TEST EBUITMENT MALFUNCTIONING.	IDBLY HAD OUT OF TO	SHED SUBASSEMELY HAD OUT OF TOLERANCE FULL MAYE RECTIFICATION MAYEF.	ECTIFICATION WAVEF	District Annual Association of the State of
CORRECTIVE ACTION-NOME,	SINCE FAILURE OF 4-3 SHOULD BE CAUCHT IN THE PRE-ENCAPSULATION TEST OF 27-43186-5.	HT IN THE PRE-ENCAP	SULATION TEST OF 27	-43186-3.	
AUTOFILOT-SQUARE-A/B	AX63-0003-2100/FC-CO-02-0013-011	COMPOST TE-FACTORY	2100 FACTORY 650515 157	22	\$30 6 8
FAILURE MODE-FAIL DURING WEMENTS AT YAM GYRO BIASIP	URING OPERATIOM. SUSTAINER AND VERNIER YAW ENGINE FEEDBACK TRACES INDICATED UNEXPECTED ENGINE MO BIASING AT 157 SECONDS AND 239 SECONDS, A FAULTY YAW MALLING AMPLIFIER (AGE) CAUSED THE PROBLEM.	IAW ENGINE FEEDBACK A FAULTY YAW MULLIN	TRACES INDICATED UN 16 AMPLIFIER (AGE) C	ANEXPECTED ENGINE HO CAUSED THE PROBLEM.	
SYSTEM EFFECT-INFROMER DISCRETE SIGNALA.	DISCRETE SIGNALA.				
CHICLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTING REQUIRED.	COURED.			···
CORRECTIVE ACTION-AGE YA	VAN HULLING AMPLIFIER INS REPLACED.				
AUTOFILOT-SQUARE-A/B	A-58-04-4318-F RATE 6TRO	FAR 27-04874-5	630513 FACTORY	YES HONEYMELL NO JRS101AR	•••0
HILURE MODE-STRUCTURAL.	FAILURE MODE-STRUCTURAL. GTRO MAD LOW BENSITIVITY AT D.186 MOLT/DEGREES/BEC WHEN D.18 TO D.RI WOLT/DES/SEC 18 REGUI RED. FAILURE COMFIRMED DUE TO DISTORTED GUADRILEVERS. MOST PROBABLE CAUSE IS MECHANICAL SMOCK (MISHAKDLIMG).	VOLT/DEGREES/SEC W- PROBABLE CAUSE 18 ME	EN D.18 TO D.EL VOL.	TYDEG/SEC IS REGULANDLING).	
CORRECTIVE ACTION-6D/C R DEC. 1988: VENDOR HANDLI	CORRECTIVE ACTION-60/C REVIEWED FACTORY AND VENDORS HANDLING TECHNIRUES. PADDING ON WORKBENCHES ADDED IN FACTORY IN Dec. 1968. Vendor Handling Procedures Found Adequate.	46 TECHNIBUES. PADOI	NG ON WORKBENCHES A	DDED IN FACTORY IN	
			٠	PAGE 0344	

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

	SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE DATE DIF	817E 71ME 01F	PRI VENDOR	VENDOR NAME	
AUTOFILOT-SQ	AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4277F SHRD SUBASSEMBLY ONE	FAR R7-43165-3	630510	FACTORY	YES 60/C		• 52.0
FAILURE LTIME FR	FAILURE MODE-ELECTRICAL SHORT. THE MODU LTIMG FROM A DISCREPANT M/LAR INSULATOR.	FAILURE MODE-ELECTRICAL SHORT. THE MODULE HAD NO OUTPUT AFTER IT WAS POTTED. THE FAILURE WAS CAUSED BA A SHORT RESU TIME FROM A DISCREPANT M/LAR INSULATOR.	TER 17 WAS POTTED. T	HE FAILURE	MAS CAUS	ED BS A	SHORT RESU	
CORRECT	TIVE ACTION-ALL MY	CORRECTIVE ACTION-ALL WYLAR INSULATORS TO BE INSPECTED FOR	PROPER HOLE SPACING PRIOR TO POTTING	PRIOR TO	POTTING O	OF THE HODULES.	DUES.	
AUTOPILOT-SA GTRO PACKAGE	AUTOFILOT - SQUARE - A/B STRO PACKASE	SP-99-04-4269F RAYE GYRO CAPACITOR	FAR 55-41019-5	630510	FACTORY	YE8 NO		002560
FAILURE 104 HAVI	E MODE-STRUCTURAL.	FAILURE MOE-STRUCTURAL. THE RENOTE RATE GROUP WAS REJECTED 104 HAVING EXPLODED DUE TO POSSIBLE INCORRECT APPLICATION OF	D FOR INTERMITTENT OUTPUT. THIS WAS CAUSED BY CAPACITOR of VOLTAGE.	MIPUT. THE	S MAS CAU	SED BY C	CAPACITOR C	
CORRECT	CORRECTIVE ACTION-NOWE.	THE REASON FOR INCORRECT APPLICATION OF VOLTAGE WAS NOT LEARNED.	ON OF VOLTAGE WAS IK	OT LEARNED.				
AUTOPILOT-34 67RO PACKAGE	AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4288F SHRD SUBASSEBLY ONE	FAR 27-43185-3	630510	FACTORY	YES 40/C	u	016269
FAILURE	E MODE-OUT OF TOLE	FAILURE MODE-OUT OF TOLERANCE. MODULE HAD NO OUTPUT AFTER BEING POTTED. FAILURE WAS CAUSED BY DEFECTIVE	BEING POTTED. FAILU	RE WAS CAUS	ED BY DEF		WELDS.	
CORRECT	CORRECTIVE ACTION-NOME.	EXISTING PROCESS CONTROLS ARE	ADEQUATE TO CORRECT DEFECTIVE HELDING PROCEDURES	ECTIVE WELD	THE PROCE	DURES.		
AUTOPILOT-SQ	AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-98-04-4302-F RATE GYRO	FAR 27-45045-805	630507	ETR	YES		897763
FAILURE ATTON OF	FAILURE MODE-FAILED TO OPERATE A TION OF POWER. SILICONE PLUID WA	OPERATE AT PRESCRIBED TIME. RATE GYRO SPIN HOTOR DID HOT START UNTIL 30 MINUTES AFTER APPLIC FLUID WAS FOMD IN THE MOTOR ASSEMBLY.	TRO SPIN MOTOR DID H	OT START UN	ITIL 30 H)	INUTES A	FTER APPLIC	
CORRECT	CORRECTIVE ACTION-VCAR '	TO HOMETHELL TO INVESTIGATE IMPROVEMENT OF	EMENT OF GYRO CASING BOLDER BEALS.	SOLDER SEA	. 69.			
AUTOPILOT-SE GYRO PACKAGE	AUTOFILOT - SQUARE - A/B GTRO PACKAGE	A-08-04-4310-F DISFLACEMENT GYRO AMPLIFIER	FAR 27-41002-695	40،000	£7.	YES KEA NO	KEARFOIT	-
E FAILURE CT CAUSE	E HODE-OUT OF TOLI	FAILURE MODE-OUT OF TOLERANCE, ROLL DISPLACEMENT AVERAGE AMPLIFIER SAIN OV., OF TOLERANCE, FAILURE CONFIRMED BUT EXA CT CAUSE MOT DETERNINED BY FAILURE ANALYSIS,	AMPLIFIER SAIN OV.	F TOLERANCE	E. FAZLUR	S CONFIR	INED BUT EXA	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

SYSTEM	TEST/NEPORT NUMBER	DIF DATA BOURCE	VEHICLE SITE PRI VENDOR MANE	ART 10
- 57 T.C.X	TAILED CONTORNI MANE			001343
CORRECTIVE ACTION-NO CO AUTOFILOT-SQUARE-A/B 6VRO PACKAGE	CORRECTIVE ACTION-NO CORRECTIVE ACTION ON SYRO SINCE CAUSE OF FAILURE NOT COMPLETELY DETERMINED. TOPILOT-SQUARE-A/B A-9B-04-4318-F FAR 830307 ETR RO PACKAGE 87-43186-3	PAR FAR 27-43106-3	PLETELY DETERMINED. 630507 ETR 168	991170
FAILURE MODE-ELECTRICAL	CAL OPEN, FAULTY WELD JOINT ON CATHODE OF CR-2 (IM488 DIODE).	OF CR-E (IM498 DICC	. (30	
CORRECTIVE ACTION-6D/C E STRENCTH OF EACH MELD	CORRECTIVE ACTION-6D/C VELD PROCESS SCHEDULES AND BC TESTS REVIEWED AND FOUND ADEQUATE. EIGHT POUND MIMIMUM BREAKAS STRENCTH OF EACH WELD AS REQUIRED BY NANUFACTURING PROCESS SPECIFICATION CONSIDERED ADEQUATE.	REVIEWED AND FOUND \$ SPECIFICATION COM	ADEQUATE. EIGHT POUND MINIMUN SIDERED ADEQUATE.	MEAKAG
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-4309-F RATECTRO 3460	FAR 27-04574-3	650506 FACTORY YES JRSSGSAR	
FAILUPE MODE-OUT OF TOL	FAILUPE HODE-OUT OF TOLERANCE, GYRO REJECTED FOR NO SHRD OUTPUT, FAILURE CONFIRMED DUE TO DEMACHETIZED SHRD MAGNET. SOURCE OF VOLTAGE TRANSIENTS CAUSING DEMACHETIZATION NOT DETERMINED.	UPPUT, FAILURE COMFI ETERHINED.	IRNED DUE TO DEMAGNETIZED SHRID	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
CCRRECTIVE ACTION-6D/C AREFIL, NOT TO APPLY ANY LTAGE TRANSIENTS.	INITATED INSTRUCTIONS TO ELECTRONICS MANUFACTURING PERSONNEL MANUFACTION IS CAUSED BY VO.	AS STUDIES HAVE SHE	ON SHED DEMACHIZATION IS CAUSE	9
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-G4-4262F SHKD SUBASSCHBLY THO	453 R740106U	630505 FACTORY YES GDZC	94 MAR C 4 MAR
FAILURE MODE-OUT OF TOL	FAILURE MODE-OUT OF TOLERANCE. THE MODULE WAS REJECTED FOR OUT OF TOLERANCE MANEFORM. CORRECTIVE ACTION-MONE, FAILURE NOT CONFIRMED.	OUT OF TOLERANCE W	АИЕРОВИ.	
AUTOFILOT- SQUARE-A/B GYRO PACKAGE	AX63-0003-750/FC-CQ-01-0006-003	COMPOSETE-PACTORY	75D FACTORY NO 630303 FACTORY NO	
FAILURE MODE-FAIL DURIN AT EXTRANGOUA INPUTS NER TAGING INTEGRATOR (STAGI	FAILUNE MODE-FAIL DURING OPERATION-ENGINE RESPONSES AND TELEMETRY PECONDINGS OF THE DISPLACEMENT GYROS INDICATED TH .T EXTRANEOUJ INPUTS WERE PHESENT IN THE (ACE) GYRO MALLING LOOPS. AS A RESULT, THE REACTIVATION OF THE PROGRAMMER S .AGING INTEGRATOR (STAGING PLUS 10 SECONDS) WAS MASKED.	LEMETRY RECORDINGS (LOOPS, AS A REBULT	RECORDINGS OF THE DISPLACEMENT GYROS INDIC AS A RESULT, THE REACTIVATION OF THE PROGR	INDICATED TH PROGRAMMER &
BYSTEM EFFECT-M/ME.				
VEHICLE EFFECT-COMPOSITY	VENICLE EFFECT-COMPOSITE RESCHEDULED. A SECOND COMPOSITE WAS RESUIRED.	AS REGUIRED.		
			(4)	PAGE 0348

	11 JUN 1016	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PELOT SYSTEM-AIRBORI	¥				
	BYBTEN BUB-BYBTEN	TEST/REPORT NUMBER FAILED COMPONEY; NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 11HE 01F	¥ 50	VEHICLE BITE PRI VENDOR MAME DATE DIP TIME DIP OTH VENDOR PART NO	
	CORRETTIVE ACTION-A CAPA	14-A CAPACITOR WAS INSERTED INTO THE PLIGHT CONTROL (AGE) TO ISOLATE THE IMPUT FROM THE IRRS A/P 6TR THE RIGHAL CONDITIONER FROM THE MULLIMS LOOPS.	CCHTROL (AGE) TO 184 2Pa.	XATE THE	INPUT FRO	# 74	1885 A/P 6YR	******
	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	37-98-04-4238F RATE 67RO	FAR 55-41010-5	61 0501	FACTORY	7.C.		*****
	FAILURE MODE-OUT OF TOLERANCE. OR IN THE CALIBRATION PROCEDURE.	OF TOLERANCE, RENOTE RATE GROUP WAS REJECTED FOR LOW ROLL RATE TORBUING GAIN RESULTING FROM AN ERR FION PROCEDURE.	TED FOR LOW ROLL RATI	E TORBUÍNG	GAIN RED	¥. 7	C FROM AN ERR	
	CORRECTIVE ACTION-CALIBR	CORRECTIVE ACTION-CALIBRATION PROCEDURE WAS CORRECTED.						1
	AUTOPILOT-SQUARE-A/B G/RO PACKAGE	A-99-04-4311-F DISPLACEMENT 6YRO WIRE	FAR 7-04230-3	6 50501	FACTORY	YES OF	YES KEARFOTT NO CTO 2506 DDO	902099
	FAILUNE MODE-DRIFT. GYRO IS 3.0 DEGREES PER HOUR (FAILURE MODE-DRIFT. GYRO EXMIBITED EXCESSIVE FIXED RESTRAINT DRIFT AT 0.5T DECREES PER HOUR WHERE MAXIHUM ALLOMH IS 3.0 DECREES PER HOUR FAILURE CONFIRMED, PNOBABLY DUE TO ONE OR HORE DISTORTED FLEXLEADS (KNOMM FAILURE MODE)	AT DAIFT AT 8.ST DEGI	TEES PER H ED FLEXLEA	OUR WHERE DB (KNOWN	FAIL	HUM ALLOWIBLE URE HODE?	
	CORRECTIVE ACTION-6D/C II	CCRRECTIVE ACTION-GD/C INCORPORATED NEW MARN-UP COOL-DOMN AND MANDLING REQUIREMENTS INTO PROCEDURES. VENDOR RE-DESI CMED 6/RO BY ADDING BAFFLES MEAR FLEXLEADS TO REDUCE POSSIBILITY OF PLEXLEAD DISTORTION.	ND HANDLING REGUIRE) ILITY OF FLEXLEAD DIS	ENTS INTO	PROCEDUR	. E3	ENDOR RE-DESS	
	AJTOFILOT-SQUARE-A/B	5F-99-04-4331-F 34RD	FAR 27-43286-3	630501	FACTORY	9 9 2 2	5/O s	****
	FAILURE MODE-OUT OF TOLE! TIFIED WOLTAGE GREATER TH- MET.	OF TOLERANCE. TWO SHRD SUBASSENBLIES FAILED CHECKOUT WITH TIME BETWEEN PULSES OF THE FULL-WAVE REC EATER THAM CHE-HALF OF A PULSE MIDTH, FAILURE FOUND CAUSED BY INCORRECT IMPUT VOLTAGE IN SHRD TEST	ED CHECKOUT WITH TIME	BETWEEN INCORRECT	PULSES OF	7 7 5 2 3 5	FULL-WAVE REC IN SHID TEST	
	CCARECTIVE ACTION-60/C RI PE TO THE 269, AS OUTPUT N-E VILL ELINIMATE REJECT	CCRRECTIVE ACTIOM-60/C REVISED CHECKOUT PROCEDURE BY ADDING MOTE-IF PATTERN INDICATES A FAILURE, COMMECT OSCILLOSCO E TO TTE 269, AS OUTPUT TEAHIMAL, AND INSURE VOLTACE IS 10 V P-P OR MORE BEFORE REJECTING PART UNDER TEST, THIS CHA JE WILL ELIKIMATE REJECTIONS OF SUBASSEMBLIES DUE TO INSUFFICIENT TEST SET VOLTAGE.	ADDING NOTE-IF PATTERN INDICATES A FAILURE, COMMECT OSCILLOSCO 18 10 V P-F OR WORE BEFORE REJECTING PART UNDER TEST, THIS CHA INSUFFICIENT TEST SET VOLTAGE.	DICATES A E REJECTIN FAGE.	FAILURE.	CONT.	CT OSCILLOSCO EST. THIS CHA	
•	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	CT-88-04-08 2 6780	FAR 69-42001-677	1160	RTA	YES O	5/03	
1	FAILURE MODE-OUT OF TOLES E PACKAGES, THIS PACKAGE I CE THE GYROSCOME PACKAGE UTED FOR FAILURE AMALYBIS. T BE DETERNINED	OF TOLERANCE, PITCH AND ROLL PROGRAM BLAVING BENSITIVITIES MERE LOM, DUE TO A SHORTAGE OF GYROSCOP ACKAGE UAS THEN PLACED ON HIBSILE 116-D TO SUPPORT HIBSILE TEST. REPORT FAILURE NOT COMPINED. SIN ACKAGE HAS PLACED ON A HIBSILE TO SUPPORT MISSILE TEST AFTER REPORTED FAILURE, INSTEAD OF BEING ROMALYSIS, THE EXACT CONDITION OF THE GYROSCOPE PACKAGE AT THE TIME OF THE REPORTED FAILURE COULD NO	ING SENSITIVITIES WER S SUPPORT HISSILE TE HISSILE TEST AFTER I COPE PACKAGE AT THE	TE LOW. DV	FAILURE INCLURE INCLURE INCRONTEL	COTAG MOT C NSTEA	E OF SYROSCOP OWFIRMED. SIN D OF BEING RO LURE COULD NO	

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SECRETARIED TO DISPOSITION FAILED ITEMS FOR FAILURE AMALYSIS. INSTEAD OF FAR RESPECTORY TES GO/C WHIRE ET-72555-1 SELED PACTORY TES GO/C UNING TEST OF HISSILE RID SECAUSE OF SROKEN FLEX LEAD. DESSEMED INCORNORATINE BAPFLES TO REDUCE FLEX LEAD DAMAGE. DESSEMED INCORNORATINE BAPFLES TO REDUCE FLEX LEAD DAMAGE. FAR 830426 FACTORY TES HOMETHELE SSISSON FOR THE FAR 830426 FACTORY TES GO/C SSISSON FOR THE FAR HAS HEATED. FAILURE DUE TO SAD WELD. N PROCRAM HAS NOT COMPLETED UNEN THIS UNIT WAS BUILT. FOR A MODULE HAS HEATED. FAILURE DUE TO SAD WELD. FOR FARE TO DISTORTED FLEX LONGS.	STEMS FOR FAILURE AMALYSIS, INSTEAD OF STEED PACTORY YES 60/C 650428 OF SROKEN FLEX LEAD. REDUCE FLEX LEAD DAMACE. 430426 FACTORY YES HOMEYMELL MO JASSOSAL TEST IN ELECTRONICS NAMED TOR FAILURE ANALYSIS, INSTEAD O TESTS SECAUSE OF SECTORY YES GO/C THE BAPPLES TO REDUCE PLEX LEAD DANACE. THE BAPPLES TO REDUCE PLEX LEAD DANACE. ASSOCIATE TO SECTORY YES HONEYMELL ASSOCIATE TO SECTORY YES GO/C ASSOCIATE THIS UNIT WAS BUILT. BSD424 FACTORY YES GO/C ASSOCIATE TO BAD WELD. DO PLEX 155/25. THE STATES TO BE UCE FLEX LEAD DANACE.	
BEED FACTORY YES 60/C BEDUCE FLEX LEAD DAMACE. BEDUCE FLEX LEAD DAMA	BEED FACTORY YES 60/C BEOUGE FLEX LEAD. OF BROKEN FLEX LEAD. BEDUCE FLEX LEAD DAMAGE. BEDUCE FLEX LEAD DAMAGE. BY JABO FACTORY YES HONEYMELL MIS UNIT WAS BUILT. BY JAH WAS BUILT.	BEED FACTORY YES 60/C BEDUCE FLEX LEAD DAMAGE. BEDUCE FLEX LEAD DAMAGE. BASOARE FACTORY YES MOMEYMELL MO JASSOARE BASOARE FACTORY YES 60/C BASOARE NO BASOAREA. NOST PROBABL ILURE DUE TO BAD WELD. BASOARE FACTORY YES KEARFOIT BASOARE FACTORY YES FACTORY FACT
OF BROKEN FLEK LEAD. REDUCE FLEX LEAD DANACE. 835426 FACTORY YES HONEYHELL MO JRSIGIAE MO JRSIGIAE 1305 FACTORY YES 60/C 830424 FACTORY YES 60/C MIS UNIT WAS BUILT. 630424 FACTORY YES KEARFOTT MO	OF BROKEN FLEX LEAD. BEDUCE FLEX LEAD DANACE. BEDUCE FLEX LEAD DANACE. BEDUCE FLEX LEAD DANACE. MO JASSORAL BESOARA FACTORY YES GO/C BESOARA FACTORY YES GO/C BESOARA FACTORY YES KEARFOIT BEDUCE FLEX LEAD DANAGE.	OF BROKEN FLEK LEAD. REDUCE FLEX LEAD DAMAGE. 430426 FACTORY YES HOMEYMELL MO JRSIGIAE ONICS HAMFACTURING AREA: NOST PROBABL ILURE DUE TO BAD WELD. 430424 FACTORY YES SQUE 630424 FACTORY YES REARFOIT 630424 FACTORY YES REARFOIT N. UCE FLEX LEAD DAMAGE.
ABDAZE FACTORY YES HOMEVIELL B3DAZE FACTORY YES HOMEVIELL B3DAZA HOME TO BAD WELD. H1S UHIT WAS BUILT. B3D4ZA FACTORY YES REARFOTT H1S UHIT WAS BUILT. B3D4ZA FACTORY YES REARFOTT H0	ABOAR FALEN LEAD DANAGE. 430426 FACTORY YES HOMEVIELL MO JASIDIAL MO JASIDIAL MO JASIDIAL 1300 FACTORY YES 60/C 430424 FACTORY YES 60/C 430424 FACTORY YES REARPOIT MS UNIT WAS BUILT. MO MANAGE.	ABOAR FACTORY YES HOMEVIELL ASSOAR FACTORY YES HOMEVIELL ASSOAR FACTORY YES 60/C ASSO4R FACTORY YES 60/C ASSO4R FACTORY YES MARROTT ASSO4R FACTORY YES KEARFOTT ASSO4R FACTORY FACTO
SOURCE NAMIFACTURING AREA. HOST PROBABL 150D 450424 HOS PACTORY YES 60/C 450424 HIS UNIT WAS BUILT. 630424 FACTORY YES KEARFOTT HOST	ONICS NAMUFACTURING AREA. NOST PROBABIL. 130D 630424 NO 1LURE DUE TO BAD WELD. 630424 FACTORY YES KEARFOTT 630424 FACTORY YES KEARFOTT NO NO USE FLEX LEAD DAMAGE.	MICS NAMUFACTURING AREA. NOST PROBABIL 1300 430424 NO FACTORY YES 60/C 430424 FACTORY YES REAPOTT 630424 FACTORY YES REAPOTT NO. UCE FLEX LEAD DAMAGE.
130D FACTORY YES 60/C 630424 NO ILURE DUE TO BAD MELD. HIS UNIT WAS BUILT. 630424 FACTORY YES KEARFOTT NO	4304 FACTORY YES 60/C 430424 MO MELD. HIS UNIT MAS BUILT. 630424 FACTORY YES REARFOIT No UCE FLEX LEAD DAMAGE.	430424 NO BAD WELD. ILURE DUE TO BAD WELD. 430424 FACTORY YES KEARFOTT N. UCE FLEX LEAD DAMAGE.
HLURE DUE TO BAD WELD. HIS UNIT WAS BUILT. 630424 FACTORY YES KEARFOTT NO	HIS UNIT WAS BUILT. 630484 FACTORY YES REARFOTT NO. UCE FLEX LEAD DAMAGE.	MIS UNIT WAS BUILT. 630424 FACTORY YES REARFOIT NO. UCE FLEX LEAD DAMAGE.
630424 FACTORY YES REARFOIT NO	630424 FACTORY YES REARFOIT NO NO NA UCE FLEX LEAD DAMSE.	630424 FACTORY YES REARPOIT NO NO. UCE FLEX LEAD DAMAGE.
DRIFT DUE TO DISTORTED FLEX LINES.	TIFT BUE TO DISTORTED FLEK LAND. NESTEMED INCOMPORATING BAFFLES TO M. UCE FLEK LEAD DAMMEC.	he uce plex lead damee.
	STRIFFED INCOMPORATING DAFFLER TO NO UCE PLEK LEAD DAMBE.	

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE

SYSTEN SUB-STÖTEN	TEST/MEPONT KUNBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE SI	SITE PRI VENDOR NAME	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	NZ-88-04-4266-F ZATE 67RO	FAR 27-04574-3	830423 FACTORY	ORY YES HONEYMELL NO	*****
FAILURE MODE-OUT OF TOLE O FROM A RENOTE RATE SHOU NO.	TOLERANCE. THE TORGUER COULD NOT BE CALIBRATED IN THE FACTORY. APPARENTLY, THE GYRO WAS REJECTE GACUP BECAUSE THE TORGUER AMPLIFIER COULD NOT BE CALIBRATED. NO DISCREPANCY MAS FOUND IN THE GY	IBRATED IN THE PACT. D NOT BE CALIBRATE	DAY. APPANENTL D. NO DISCREPA	V. THE STRO WAS REJECTE NCY MAS FOUND IN THE SY	
CORRECTIVE ACTION-MOME. AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE WAS HOT COMPTRHED. CT-99-D4-C58F YORGUER ANPLIFIER CIRCUIT BOARD	FAR E7-41566-607	1260 FACTORY 630423	047 NO 60/C	*00
FAILURE HODE-OUT OF TOLE IN FOR THRIE SUSPECTED COL	FAILURE HODE-OUT OF TOLERANCE, THE CIRCUIT BOARD WAS DIRECTED TO FAILURE ANALYSIS BY NASA, USAF, AND 60/C INSPECTION FOR THRIE SUSPECTED COLD SOLDER JOINTS. THE SUSPECTED DISCREPANCY WAS NOT CONFIRMED.	D TO PAILURE AMALY. REPANCY MAS NOT COM	SIS BY MASA, L'	BAF, AND GD/C INSPECTIO	
		FAR 7-04£50-3	\$30423 FACTORY	CRY YES KEARFOTT NO C702506060	
FAILURE HOUE-OUT OF TOLE 3.0 DEGREES PER HOUR MAX.	TOLERANCE. MASS UMBALANCE DRIFT OF 4.62 DEGREES FER HOUR CBSERVED DURING RECEIVING INSPECTION (MAR ALLOMABLE). FAILURE MOST PROBABLY CAUSED LY TEST EQUIPMENT MALFUNCTION OR HUMAN ERROR.	DEGREES PER HOUR OI LUSED DY TEST ERLING	SSERVED DURING HENT MALFUNCTE	RECEIVING INSPECTION (ON OR HUMAN ERROR.	
CORRECTIVE ACTION-FAILUR PARANETERS WERE WITHIN SPI TOLERANCE 6TRO REJECTIONS	AILURE NOT CONFIRMED. GO/C REPEATED A FULL RECEIVING INSPECTION USING FACTORY EQUIPMENT AND ALL IN SPECIFICATIONS. INSTRUCTIONS WERE SENT TO RECEIVING INSPECTION RECOMMENDING RETEST OF OUT OF TIONS REFORE REMOVAL FROM TEST PIXTURES WITH DOCUMENTATION OF ACTION IN THE INSPECTORS REPORT.	L RECEIVING INSPECTOR TO RECEIVING INSPIRED TO RECEIVING INSPIRED THE DOCUMENTATION (TION USING PAC ICTION RECOME OF ACTION IN T	TORY EQUIPMENT AND ALL NO. BEEFEST OF OUT OF HE INSPECTORS REPORT.	
AUTOFILOT-SQUARE-A/B	8P-99-04-4284F 6YRO, DISPLACEMENT-8MED	FAR 7-04250-3	630422 FACTORY	ORY YES	*****
FAILURE MODE-SHORT, ELEC S CAUSED BY A BEND IN THE THE PLOAT WAS IN THE FULL LOTATION FLUID COLD, THE	FAILURE MODE-SHORT, ELECTRICAL, SMRD OUTPUT DISAPPEARED WHEN THE GYRO WAS TORGUED TO ITS FULL CCM POSITION. THIS WAS CAUSED BY A BEND IN THE SHRD FLEX LEAD FOST ATTACHED TO THE FLOAT ALLOHING THE FOST TO SHORT TO THE GYRO CASE WHEN THE FLOAT WAS IN THE FULL CCM POSITION, THE DANAGE TO THE FOST HAY HAVE BEEN CAUSED BY TORGUING THE GYRO WITH THE FLOATION FLUID COLD, THE ACTUAL CAUSE OF THE DANAGE WAS NOT LEAPHED.	HE GYRO WAS TORGE OF PLOAT ALLOATING THE WAY HAY HAVE BEEN C.	JED TO ITS FUL E POST TO SHOR NUSED BY TORGU	L CCW POSITION, THIS WA T TO THE GYRO CASE WHEN ING THE GYRO WITH THE F	
CORRECTIVE ACTION-NOME.		in desar pister desartin ist dependent ein			
		Anneanade systematic specific and state that share the		PAGE 0349	

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VEHICLE BITE PRI VENDOR NAME DATE DIP TIME DIP OTH VENDOR PART NO	3. G.	LTAGE IN TEST SET.	1E8 40/4 NO	4 DEGREE PER SECOND	INAL CALIBRATION OF	§ §	E OF THE MARKING A BUE TO A BROKEN FL. 18 80-07900-02.	AND CORRECTED.	7E\$ 60/C NO	AL CUIDANCE SLAVING
11 to 21 T	FACTORY	§ 30 4	ETR	CORRECT	THE ORIG	Ę	ER FAILED ND FAILER OR FAILED NPLIFIER	QUI PHENT	FACTORY	HALF HORD
VEHICLE DATE DIF	930419	A CAUBED	1300	NACEDURE	ABLY AFTER	1900	FINE HEAT RHEATING A O SPIN MOT MAGNETIC A	E GROUND E	430417	CKASE HAD
DIF DATA SOURCE	FAN 87-48186-8	MAVEFORM, PAILURE M	F 1N 27-41002-697	PITCH BLAVING PROGAL ATED TO AN CBSCLETE !	E APRIL 6, 1965 PRCB/	FAR 27-72565	ECTED WHEN ROLL GYRO INE RESULTING IN OVE TCH DISPLACEMENT GYRE PART MANBER OF THE	INE MAS FOUND IN ALT	FAR 27-41639-635	decause the byro pa break dom.
TEAT/REPORT NUMBER	NZ-ee-04-4Kei-F SHMO SUBASSEMBLY TWO	FAILURE MODE-OUT OF TOLENAME: MODULE HAD IMPROPER OUTPUT WAVEFORM, FAILURE WAS CAUSED BY LOW VOLTAGE IN TEST SET. Mere was no failure of the shald module. Corpective action-mode, Failure of shald not confirmed.	H6-88-04-428-F	FAILURE WODE-OUT OF TOLEMANCE. 6TRO CAN FAILED & WOLT COW PITCH BLAVING PROGRAM. OUTPUT WAS D.784 DEGREE FER SECOND. , SHOULD BE NOT LESS THAN D.781, CAN WAS ORIGINALLY CALIBRATED TO AN OBSOLETE PROCEDURE. CORRECT PROCEDURE PROVIDES WORE ACCURATE NETHOD OF CALIBRATING 67RO CANS.	CORRECTIVE ACTION-NOME. REVISED PROCEDURE BECAME EFFECTIVE APRIL 8, 1965 PROBABLY AFTER THE ORIGINAL CALIBRATION OF	SP-9D-04-4236 AMPLIFIER	FAILURE MODE-FAIL DURING OPERATION. MAIN GYRO CAN MAS REJECTED MHEN ROLL GYRO FINE HEATER FAILED. THE FAILURE MAGNETIC A USED BY ACCIDENTAL GROUNDING OF THE ROLL HEATER MONITOR LINE RESULTING IN OVERHEATING AND FAILURE OF THE MAGNETIC A PLIFIER TEMPERATURE CONTROLER. DURING THE AMALYSIS THE PITCH DISPLACEMENT GYRO SPIN MOTOR FAILED DUE TO A BROKEM PL IX LEAD. THIS WAS NOT RELATED TO THE ORIGINAL FAILURE. THE PART NUMBER OF THE MAGNETIC AMPLIFIER IS 80-07900-02.	CORRECTIVE ACTION-THE CAUSE OF THE SHORT ON THE MONITOR LINE WAS FOUND IN BITE GROUND EQUIPMENT AND CORRECTED.	SP-09-04-4230F AMPLIFIER TORQUER	FAILUNE MODE-ELECTRICAL BHORT. THE AMPLIFIER WAS REJECTED BECAUSE THE GYRO PACKAGE HAD MALF MORMAL GUIDAMEE SLAVING Output, chore li had shorted mindings due to insulation break domm.
BYBICH	AUTOFILOT-SQUARE-A/B	FAILUME MODE-OUT OF TOLENAME. MODULE H THERE HAS HO FAILUME OF THE SHAD MODULE. CORRECTIVE ACTION-MOME, FAILUME OF SHAD	AUTOFILOT-SAUARE-A/B GTRO PACKAGE	FAILURE WODE-OUT OF TOLEMANCE, 6YRO CAN PAILES , SHOULD BE HOT LESS THAN 0.787, CAN MAS ORIGINANCE ACCURATE NETHOD OF CALIBRATING 6YRO CAMS.	CORRECTIVE ACTION-NOME.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-FAIL DURING AUSED BY ACCIDENTAL GROWN MELIFIER TEMERATURE CONTEX LEAD. THIS WAS NOT REL	CORRECTIVE ACTION-THE C	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	FAILUME MODE-ELECTRICAL OUTPUT, CHONE L1 MAD SH

CORRECTIVE ACTION-NOME. VENDOR OF CHOKE IS OUT OF BUSINESS.

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GENERAL DYNAMICS CONVAIR DIVISION

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SATISTICAL STREAMS TESTATED THANKER DIF DATA BOARD TO THE DATA BOARD AND THE BOARD AND THE DATA BOARD AND THE BOARD AND THE DATA BOARD AND THE DAT	DIF DATA BOURCE VEHICLE PART NUMBER ADEQUATE D. FAILURE MAS CA ADEQUATE TO CORRECT DISCR FAR B SHORT ON THREE PHASE LIN ST SET TETSOGS SAW S. TWO ET-410002-897 WHICLE BITE DATE DATE DIP TIME DIP WAS CAUSED BY A D SO	PRI VENDOR HANE OTH VENDOR PART NO VES 6D/C NO DEFECTIVE MELD. PROCEDURES. NO 6D/C NO OF SPIN NOTOR TRAN E 45 VOLTS INSTEAD VES KEARPOTT NO	
F TOLI FURAL	# # # # # # # # # # # # # # # # # # #	S PACTORY CAUGED BY A E STACTORY STACTORY STACTORY STACTORY CTR ETR	VES 60/C NO PROCEDURES. NO 60/C NO OF SPIN NOTOR TRAN E 45 VOLTS INSTEAD VES KEARFOTT NO
TURAL BEGAL	SEQUATE TO CORRECT DIS- ALDOR-883 BHORT ON THREE PHASE L SET TETSOGS B/M S. TW ALEMENT GYRO DRIFT. NO K LEADS.	CAUSED BY A I	PROCEDURES. NO 60/C NO 60/C NO SPIN NOTOR TRAN E 45 VOLTS INSTEAD VES REARPOTT NO
FIGAL BEORE.	A1002-883 -41002-883 -41002-883 -410002-887 -1300 -410002-887 -1300 -12003-887 -1300 -12003-887 -1300 -1300	S FACTORY S FACTORY O PHASES MEN	NO 60/C NO OF SPIN NOTOR TRAN E 45 NOLTS INSTEAD YES REARPOTT NO
MICAL BOOK	SET TETSOGS S/N B. TW SET TETSOGS S/N B. TW 130D 410002-897 430411 CCHENT GYRO DRIFT. RO	DO PHASES WENT OF PHA	OF SPIN HOTOR TRAN E 45 MOLTS INSTEAD TES REARPOTT NO
TURAL. RANCE.	1300 410002-897 43041 (CEMENT GYRO DRIFT. RO	# H	VES REARFOTT NO
TURAL. RANCE.	1300 410002-897 63041 (CEMENT GYRO DRIFT. RO	# E E	VES REAMPOTT NO
TURAL. RANCE.	ICEMENT GYRO DRIFT. RO K LEADS.		
67.108		LL DISPLACEM	ENT NO 1463 ALBO H
	TO REDUCE PLEX LEAD D	AMGE.	
	1930 -44534 65CA12	47.8 5	7E8 80
FAILURE HODE-ELECTRICAL CPEN. CAN MAS REJECTED FOR HO BHRD OUTPUT. THE PAILURE HAS ISOLATED TO AN OPEN DIODE IN THE OUTPUT OF THE SHAD SUBASSENDLY 2. THE DIODE MAS DESTROYED DURING DEPOTTING OF THE MODULE.	PUT. THE FAILURE WAS ING DEPOTTING OF THE WO	BOLATED TO AI DULE.	N OPEN DICOL IN THE
CORRECTIVE ACTION-NOME, CAUSE OF FAILURE OF THE DIGOE WAS NOT LEARNED.	LEARNED.		
AUTOPILOT-BRUMEE-A/B AAK1-0012/F4-4CO-01-130 COMPOS GYRO PACKAGE DIBPLACEMENT GYRO BP-410	COMPOSITE-B FACT 1300 830409 87-41002-887	141	7E3 60/C NO
FAILURE MOE-FAIL TO OPERATE AT PRESCRIBED TINE, DURING LOOP TEST, PITCH DISPLACEMENT GYRO DELAYED 1.7 SECONDS IN ESPONDING TO CUIDANCE DIZERING COMMAND, MORNAL DELAY IS 0.8 TO 0.4 SECONDS, POSSIBLY CAUSED BY STICTION SINCE GYRO	EST, PITCH DISPLACEMEN 3.4 SECONDS, POSSIBLY	CAUSED BY BY	ED 1.7 SECONDS IN R

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*****	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRSORME	TOPILOT SYSTEM-AIRBON	Ā				
BYSTEM BUD-SYSTEM	FAILED COMPONENT MANE	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF	11 ME DIF		VENDOR NAME VENDOR PART NO	
AS ACJECTED FOR STICTION	AS AEJECTED FOR STICTION BY MAINFACTURER WHEN RECYCLED TO PACTORY.	PACTORY.					95076
BYSTEN EFFECT-OPERATION	BYBTEM EFFECT-OMERATION STARTS TOO LATE, EXECUTION OF PLICH STEERING COMMAND DELAYED APPROXIMATELY 1.4 SECONDS.	CH BTEERING COMMIND I	DELAYED APP	RONINA TEL	.7 1.4 BECOM	•	
VEHICLE EFFECT-WOME. PRO	PROBLEM NOT DISCOVERED UNTIL AFTER COMPLETION OF FACT.	OMPLETION OF FACT.					
CORPECTIVE ACTION-REPLACE 6780.	CE 6740.						
AUTOPILO'-SQUARE-A/B SYNO PACKAGE	A-99-04-4265F SHRO SUBASSEMELY ONE	7.A.R. 481.65-8	430403	FACTORY	7E8 60/C NO		******
FAILURE MODE-ELECTRICAL	FAILURE HODE-ELECTRICAL OPEN. MEDULE HAD NO OUTPUT DUE TO BAD WELD AT LEAD MUMBER OME.	BAD WELD AT LEAD MU	BEN ONE.				
CORRECTIVE ACTION-NOME.		ena de aperagensperior de deservaren. ***					
AUTOFILOT-SQUARE-A/B	SP-99-04-4283F SPRD SUBASSERB',Y ONE	7A7 10	630405	FACTORY	5/ 9		*****
FAILURE MODE-CUT OF TOLI	TOLERANCE. MODULE HAD NO QUIPUT AFTER POTTING DUE TO A BAD MELD.	POTTING DUE TO A BAI	. KELD			•	
CORRECTIVE ACTION-NOME.	. ROUTINE PROCESS CONTROL SHOULD CORRECT DEFECTIVE NELD PROCEDURES.	MARECT DEFECTIVE WELD	PROCEDURE	-		-	,-··
AUTOPILOT-SQUARE-A/B	3P-99-04-4253F DISPLACEMENT GYRO WIRE	FAK 7-04250-3	630404	FACTORY	TES REARFOIT HO	-	****
FAILURE MODE-ELECTRICAL OPEN. BI TERMITTENT JPIN MOTOR OPERATION.	FAILURE MODE-ELECTRICAL OPEN. SARD GUIPUT WAS INTERHITTENT, ANALYSIS SHOMED PHASE B PLEX LEAD WAS BROKEN CAUSING IN ERMITTENT JEIN MOTOR OPERATION.	IT. ANALYBIB BHONED P	HASE B FLED	נ רבעם איי	BROKEN CAL	KI SKIE	
CORRECTIVE ACTION-DISPL	CORRECTIVE ACTION-DISPLACEMENT GARUS MENE REDESIGNED INCORPORATING BAFFLES TO REDUCE PLEX LEAD DAMAGE.	SPOKATING BAFFLES TO	*EDICE PL	0 OX TEX	1 HA GE .		
AUTOFILOT-BUURE-A/B GTRO PACRAGE	8F-89-04-4282F 89RD 8UBA88EMBLY OME	FAR 87-43109-3	630404	FACTORY	YES 60/C	,	•
PAILURE HODE-OUT OF TOL. B. NO REAKON TOR THE REP	TOLERANCE, MODULE HAD INPROPER CUTPUT WAVEFORM AND COULD NOT BE CALIBRATED ON SHED CIRCUIT SCAR REPORTED DISCREPANCY WAS FOUND.	T MAVEFORM AND COULD	HOT BE CAL	IBRATED O	M BWRD CIRC	11 SOAR	
CORRECTIVE ACTION-MOME.	CORRECTIVE ACTION-MOME. THE FAILURE WAS NOT CONFIRMED.		Andrews and the second				
					i.e.	PAGE 0332	
	enderstein gegen gereine in der den er verscher seine der der der seine eine seine der der seine der eine der den der	the second secon		-	-		1

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DIFFICULTIES REVIEW-AUTOPILOT AVSTEM-AIRBORNE

NYSTEN NA-SYSTEN	TEST/REPORT NUMBER LAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	317E 71ME 01F	PRI VENDOR NAME OTH VENDOR PART NO	
1	4-88-04-4274F BHRD BUBABSEMBLY TWO	FAR 27-43186-3	420403	PACTORY	7ED 60/C NO	
₽	FAILURE MODE-ERRATIC OPERATION. MODULE HAD ERRATIC OUTPUT AT UPPER TEMPERATURE LIMIT.	AT UPPER TEMPERATUR	C LIMIT.			
CORRECTIVE ACTION-NOME.	FAILURE NOT CONTINUD.					·
	A-99-G4-4£71F 34RD 3UBA33EMBLY CHE	FAN R7-64188-W	*30403	PACTORY	7E8 60/C	988800
=	FAILURE MODE-ERRATIC OUTPUT, TWO MODULES WERE REJECTED FOR ERRATIC CUTPUT AT UPPER TEMPERATURE LIMIT.	ERRATIC CUTPUT AT I	JPPER TEMP	ERATURE LE		
	CARRECTIVE ACTION-NONE, FAILURE NOT CONFIRMED.					
	A-93-04-4279F DIAPLACCIENT SYRO HEALTH	FAR 7-04830-3	630401	FACTORY	YES KEARFOTT HO	*****
	FAILUME MODE-ELECTRICAL CPEN. MEATER WAS INTERHISTENT OUR TO BROKEN SENSON MIRE. Corsective action-tog percent instiction of heater splices, temperature cycling of all Gipsal Assys., and check of	TO BROKEN SENSON WIT TEMPERATURE CYCLIN	1E.	irsal ass	73.1 AND CHECK OF	
	8F-09-07-4817F	7AR 27-43198-5	636329	FACTORY	YES 60/C	892739
	TOLERANCE, SHED SUBASSCHOLY & HAD HIGH OUTPUT AFTER POTTING, A RIPPLE VOLTAGE OF 28 VOLTS P-P M OF 83, RIPPLE MAS ATTRIBUTED TO INCORRECT FINE CONSTANT OF CALIBRATION RESISTOR AND FILTER CAPA	CUTPUT APTER POTTIN	46. A RIPPI CALIDRATI	25 VO.7AGE 104 AESTST	OF 28 VOLTS P-P W	
	A-90-04-4254F RKED BIGASSEMBLY OME	FAR (7-43108-3	430327	FACTGRY	7E\$ 60/C	
	FAILURE MANE-ELECTRICAL OPEN-MODULE MAD NO QUIPUT AFTER BEING POTTED. FAILURE MAB ATTRIBUTED TO A BAD MELD.	ING POITED. FAILURE	A ATTA	LUTED TO A	DAD MELO.	
	aghealan epitalay di birrey, da dereyista of t topostebusyo I quadto myyd dyldyddodolaith fath Fayn	displanty (Abb displaidable de	realization of the segment of the second	penging of the section of the sectio	PACC 0355	~~~~

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	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	FILOT SYSTEM-AIRBOR	¥				
37.57£x 8.08 - 87.87£x	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF T	SITE TIME DIF	OTH O	VENDOR NAME VENDOR PART NO	
CORRECTIVE ACTION-NOME.							995497
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4216F 6TRO, DISPLACEMENT	FAR 7-04250-3	630327 F	FACTORY	YES P	KEARFOTT C702306000	192747
FAILURE MODE-OUT OF TOLERANCE. 10 MAS FOUND INSIDE FLOAT HOUSE X LEADS.	FAILURE WODE-OUT OF TOLERANCE. GYRO OUTPUT WAS NON LINEAR. HIGH DRIFT RATE WAS SEEN DURING ANALYSIS. FLOATATION FLU ID WAS FOUND INSIDE FLOAT HOUSING. FLEX LEADS WERE DISTORYED. DAMAGE WAS ATTRIBUTED TO MISHANDLING AND DISTORTED FLE X LEADS.	HICH DRIFT RATE WAS D. DAMACE WAS ATTRIE	SEEN DURIN JUTED TO MIS	G ANALY	7. A.O.	LOATATION FLU DISTORTED FLE	
CORRECTIVE ACTION-6YPD W	CORRECTIVE ACTION-6YPD MAS REDESIGNED INCORPORATING BAFFLES TO REDUCE	S TO REDUCE FLEX LE	FLEX LEAD DAMAGE.				
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	SF-90-04-4242F THERMOSTAT	FAR 27-45045-607	1900 h	MT.	YES		895662
FAILURE MODE-ELECTRICAL SHORTS. TO THERMOSTAT MAICH SHORTED TO	. SHORT. TWO RATE PACKAGES WERE REJECTED FOR NO TEMPERATURE BAFE INDICATION. FAILURE WAS DUE	CTED FOR NO TEMPERA RING OF LEADS AT TH	TURE SAFE IN	DICATIO PACKAGE	₹ 8	ILURE WAS DUE ASSEMBLED.	
CORRECTIVE ACTION-NOME. FACTOR	Y PERSONNEL MERE INSTRUCTED	TO USE GREATER CARE.	•				+
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4213F SMRD/TRANSISTOR	FAR 27-43563-1	925059	FACTORY	YES	5/0	892744
FAILURE MODE-OUT OF TOLERANCE. Y ONE IN CHAINEL ONE WAS FOUND	SMRD CIRCUIT ASSEMBLY HAD OPEN BASE TO COLLECTOR DUE	NO OUTPUT ON CHANNEL OF EXCESSIVE CURRENT.	ONE. TRANS	1810R et	8	OME. TRANSISTOR 61 OF SHRD SUBASSEMBL.	
CORRECTIVE ACTION-REABO	CORRECTIVE ACTION-REABON FOR DAMAGE TO TRANSISTOR WAS NOT	FOUND. NO CORRECTIVE ACTION TAKEN.	E ACTION TA	KEN.			
AUTOFILOT-SQUARE-A/B GYRO FACKAGE	A-99-04-4263F SHRO SUBASSEMBLY THO	**************************************	650321	FACTORY	YES OF	YES 60/C	69524
FAILURE MODE-ELECTRICAL OPEN. 818. MODULE FUNCTIONED MORNALL'.	FAILURE MODE-ELECTRICAL OPEM, MODULE HAD NO OUTFUT, LEAD NUMBER ONE FELL OUT AS HODULE MAS DEING PREPARED FOR ANALY Sis, module functioned mormally after lead mumber one was replaced, failure was attributed to faulty weld at Pin Ome	NUMBER ONE FELL OUT REPLACED, FAILURE M	AS MODULE Y	AS BEIN D TO FA	G PRE	PARED FOR ANALY MELD AT PIN ONE	
CORRECTIVE ACTION-MOME.			a grage a service de la composition della compos				
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TEAT/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DAYE DIF	\$17E TIME 01F	PRI VENDOR NAME OTH VENDOR PART NO	A -	
AUTOPILOT-TEUARE-A/B STRO PACKAGE	M6-88-04-4180-P DISPLACENENT GYRO	FAR 27-41002-697	1300 430320	C12	22		16 1740
FAILURE MODE-OUT OF YOU AVING TEST. ANALYSIS CON SET IN MHICH AN ERHOR H	FAILUME MODE-OUT OF YOLERANCE. THREE GYROSCOPE PACRAGES FAILED DURING THE 3-VOLT COUNTER-CLOCK-MISE ROLL PROGRAM SL VING TEST. ANALYSIS CONFIRMED THE INDICATED FAILURES AND ATTRIBUIED THEN TO CALIBRATION OF THE PACRAGES MITH A TEST SET IN WHICH AN ENHOR HAD BEEN MADE DUE TO LACK OF CLARITY IN THE VALIDATION PROCEDURE.	ILED DURING THE 3-W TRIBUTED THEM TO CA	LT COUNTER LIBRATION MOCEDURE.	CCOCK-K	ISE ROLL PROGR ACKAGES WITH A	1637	
CORRECTIVE ACTION-REVIS	EVISED TEST SET VALIDATION PROCEDURE 27-28651-BK/H AND PROPOSED CHANGES TO THE TEST SET-	-28631-BK/H AND PROF	OSED CHAME	E8 TO TH	E TEST SE1.		٠
AUTOFILOT-SQUARE-A/B GTRO PACRASE	3P-99-03-4264F 3PRD 3LBA33EPBLY ONE	FAR 27-43188-3	630316	FACTORY	7E3 60/C		895247
FAILURE HODE-OUT OF TOL	TOLERANCE, MODULE HAD NO OUTPUT.						
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME, PAILURE NOT CONFIRMED.						
AUTOFILOT - SQUARE-A/B GYRO FACKAGE	A-60-04-4231F	FAR 27-41002-255	24E 630318	Ĕ	TES NO		884401
FAILURE MODE-FAILED DUR	DURING OPERATION. CAN UNS REJECTED FOR INOPERATIVE PITCH MALLING LOOP.	I INDPERATIVE PLICH	NLLING 100	•			
CORRECTIVE ACTION-NOWE.	. PAILURE HOT COMFIRMED.						
AUTOPELOT-SBUARE-A/B GTRO PACKAGE	. HZ-98-[4-4181-F 34RQ MIRING	7AR 27-04574-1	1030	FACTORY	YES MINN-HOMETMELL NO		*****
FAILURE MODE-BHORT, ELE COMFIRM THE REPORTED FA P/H 7-41786-805.	FAILUME MODE-SHORT, ELECT. THE PITCH-RATE GYROGCOME REPORTEDLY PAILED BECAUSE OF NO SHAB OUTPUT, ANALYSIS COULD NOT Conjing the reported failure, Lack of Shab noltage is attributed to the Grounding of Pin 91 On Terminal Board 108:	EDLY FAILED BECAUSE HBUTED TO THE GROUNS	DAME OF TO BASE	S OUTPUT.	AMLYSIS COUL	, ************************************	
CORRECTIVE ACTION-NOME.	. FAILURE OF PITCH RATE GYRO NOT COMPIRHED.	€ IRH€O.					
AUTOFILOT-BOURE-A/B FTRO PACKAGE	A-#3-04-4177-F AMPLIFIER-REBITOR	FAR 27-45008-888	630317	Š	ž č		
FAILURE MODE-ELECTRICAL	FAILURE MODE-ELECTRICAL CPEM-IME SYROGECPF PACRAGE INDICATED MIGH TORBUING GAINS IN THE ROLL CHANNEL. SIGNAL AMPLIF IER ET-AISTS-RIS OUTPUT MOULD INTERMITTENTLY GO TO ZERO WHEN AN INPUT SIGNAL WAS APPLIED TO THE DISPLACEMENT INPUT.	IED HIGH TORBUING GA IN AN INPUT BIONAL W	NS IN THE	FOLE CHA	NHEL. SIGHAL A ISPLACEMENT IN	MPLIF PUT.	
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ABLEVE-EUE	TEST/REPORT NUMBER	DIF DATA ANDER		<u></u>	ſ
	FAILED COMPONENT NAME	PART NUMBER	DATE DIF TIME DIF	TIME DIF OTH VENDOR PART AND	
CORRECTION CAUSED BY RENIA	BY RENISTOR R-30 WHICH WOULD OPEN WHEN BLIGHTLY HEATED.	ALIGHTLY HEATED.			•
					
STATE TAKEN AND THE BANK OF TH	3#-99-04-4241-F RATE 67RO	FAR E7-04574-8	450315 FACTORY	YES HONEYMELL NO	-
FAILURE MODE-OUT OF TOLERAN MOT OUT OF TOLERAN IN 19 OUT OF TOLERANCE MHEN IT CORRECTIVE ACTION-MOME, REAS	TOLERANCE. COUNTERCLOCKWISE GINBAL LIMIT WAS OUT OF TOLERANCE, FAILURE WAS CONFIRMED. GYRO MAS WHEN IT WAS PURCHASED. THE REASON FOR GINBAL LIMIT SHIFT WAS NOT LEARNED.	IIT NAS OUT OF TOLERAL GINBAL LIMIT BHIFT NA	KE. FAILURE MAS CO.	WIRNED. GYRO MAS	
AUTOFILOT-SQUARE, A/B SP-	3P-98-04-42E9F		- 1		
K-CONTANZ	IS REJECTED	E7-D4574-3 TALIGNT TES HOMETHELL POR SHORT BETHEEN PASSE C AND GROUND, SHORT CIRCUIT WAS CAUSED BY SOL FROM THE GUTER CASE SEALING OFFIRMTON.	ME. BHORT CIRCUIT 1	YES MOMETHELL NO JRSIDIAS	***************************************
CORRECTIVE ACTION-VENDOR INST RTS AND INCREASED PLUSHING.	CORRECTIVE ACTION-VENDOR INSTITUTED IMPROVED & C PROCEDURES INCLUDING ONE HUNDRED PERCENT INSPECTION OF INTERNAL	INCLUDING ONE HUNDRE	D PERCENT INSPECTIO	M OF INTERNAL PA	
AUTOPILOT-SQUARE-A/8 A-99 STRO PACKALE GERO	4-89-04-4210F 6-RO RATE/ 4480	FAR 27-04574-5	830315 FACTORY YES		*****
FAILURE MODE-OUT OF TOLEMANCE MAHETIZED DUE TO EMADVERTENT	FAILURE MODE-OUT OF TOLERANCE, SHED CUTPUT 1488 0.38 VOLT, SHOULD BE NOT LESS TON 0.5 VOLT, SMED MAGNET HAD REEN DE PACHETIZED DUE TO IMADVERTENT APPLICATION OF VOLTAGE TO SHED OUTPUT PINS.	OULD BE NOT LESS TO SOUTHUT PINS.	Y D.S VOLT. SHIRD MAI	WET HAD REEN DE	
CORRECTIVE ACTION-NO CORRECTIV	CORRECTIVE ACTION TAKEN. REABON FOR APPLICATION OF VOLTAGE TO SHED OUTPUT PINS WAS NOT LEARNED	LICATION OF VOLTAGE 1	O SHRD CUTPUT PINS	MAS NOT LEARNED	
AUTOFILOT SQUARE-A/B BF-89 67RO PACKAGE TRANS	87-89-04-4288F Transformer	FAR 45-3	450314 PACTORY YES	OGBORNE 687s	
FAILURE MODE-SHORT ELECTRICAL. ITS IN PRIMARY AND ONE SECONDAR	ICTRICAL. THANSFORMER WAS REJECTED FOR OFTENEATIMS DURING TEST. THIS WAS CAUSED BY SHORT CIRCU	WERNEATING DURING TE	IT. THIS MAS CAUSED	BY SHORT CIRCU	

		DIFFICULTIES REVIEW-	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	ž		Ì		_
	STREE BUS-BYSTER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	SITE PRI	# 0 F E	VENDOR HAME VENDOR PART NO	
	CORRECTIVE ACTION-HOME, C	CAUSE OF THE SHORT NOT FOUND.						****
	AUTOFILOY-SQUARE-A/B BYNO PACKAGE	A-89-D4-423EF SHRD TRANSISTOR	FAR A-89-04-4232F	6 50314	FACTORY	TE S		***
	FAILURE MODE-ELECTRICAL S TO MEGATIVE SIDE OF CAPACI EXERTED MY THE POTTIMS MAI	FAILURE MODE-ELECTRICAL SHORT. THE SUBASSEMBLY HAD NO OUTPUT AFTER POTTING. COLLECTOR OF TRANSISTOR AZ MAS SHORTED To NEGATIVE SIDE OF CAPACITOR CE DUE TO CONTACT BETHEEN CASES OF THE COMPONENTS. FAILURE MAS ATTRIBUTED TO PRESSURE EXERTED BY THE POTTIMS MATERIAL. CAPACITOR SHOULD HAVE BEEN INSULATED PER BYP 27-43165.	JPUT AFTER POTTING. COASES OF THE COMPONENTIEN INSULATED PER B/P I	ALLECTON OF 1. FAILURE 27-43185.	TRANSTETOR GE MAS ATRIBUTED	io e La Tir	HAS SHORTED TO PRESSURE	
	CORRECTIVE ACTION-VISUAL	AIDS WERE REVISED TO SHOW CAPACITOR INSULATED PER BLUE PRINT.	TOR INSULATED PER BL	JE PRINT.				
	AUTOLILOT-SQUARE-A/B GYRO PACRAGE	NZ-89-64-4340-F CIRCUIT BCARD SMRD	7.AB	630314	FACTORY	YES B	5/0 5	!
	FAILURE MODE-ELECTRICAL OPEN. I BETWEEN RESISTOR R14 AND NZLL ND TEMPERATURE TESTS.	TRICAL OPEN. SHRD SURASSEMBLY I HAD NO QUIPUT, FAILURE CONFIRMED ON OME UNIT DUE TO POOR WELD JOIN R14 AND NELD RIBBON, FOUR UNITS EXHIBITED NO FAILURE INDICATION THROUGHOUT EXTENSIVE FUNCTIONAL A 18.	OUTPUT, FAILURE CONFII	NED ON ONE	UNIT BUE	10 TO 1	POCE NELD JOIN E FUNCTIONAL A	
	CORRECTIVE ACTION-6D/C NE N BREAKAGE STREWGTH OF EAC VESTIGATION AND EFFORT TO	CORRECTIVE ACTION-60/C WELD PROCESS SCHEDULES AND QC TESTS WERE REVIEWED AND FOUND ADEQUATE. THE EIGHT-POUND HINIMU H BREAKAGE STREWGTH OF EACH WELD AS REQUIRED BY WANNFACTURING PROCESS SPECIFICATION WAS CONSIDERED ADEQUATE. GO/C IN WESTIGATION AND EFFORT TO IMPROVE THE RELIABILITY OF WELDS IS CONTINUING.	ITS WERE REVIEWED AND I MING PROCESS SPECIFIC OS IS CONTINUING.	FOUND ADEBU	ATE. THE OHSIDERED	ADE	I-POUND HINEHU BUATE, 60/C IN	
	AUTOFILOT - SQUARE - A/B GYNO PACSAGE	3F-99-04-4341-F CIRCUIT BOARD 54RD	FAR 27-43106-3	630314	FACTORY	YES 60/C NO	5/0	
	FAILURE MODE-OUT OF TOLES LD JOINT BETWEEN THE COLLE UT EXTENSIVE TEBTS.	OF TOLEKANCE, SMED SUBASSEMBLY OUTFUTS NERE LOW, FAILUNE CONFIRMED ON ONE UNIT DUE TO DEFECTIVE ME THE COLLECTOR OF TRANSISTOR 8-4 AND MELD RIBBON. BIX UNITS EXHIBITED NO FAILUNE INDICATION THROUGHO 1.	WERE LOW, FAILURE COM RIBBON, BIX UNITS EX	FIRMED ON CHIBITED NO	ME UNIT O	7 30E 16	D DEFECTIVE HE	
1	CORRECTIVE ACTION-6D/C NE EFFORT TO IMPROVE THE REL UDE IMPUT VOLTAGE CHECK AN	CORRECTIVE ACTION-50/C WELD PROCESS SCHEDULES AND GC TESTS WERE REVIEWED AND FOUND ADEQUATE. GD/C INVESTIGATION AND EFFORT TO IMPROVE THE RELIABILITY OF WELDS IS CONTINUING. FACTORY EQUIPMENT OPERATING PROCEDURE WAS REVISED TO INCLUDE INFUT VOLTACE CHECK AND FACTORY PERSUNNEL WERE ALERTED TO THE ERROWEOUS REJECTIONS AND REVISED PROCEDURE.	STS HERE REVIEMED AND FOUND ADEQUATE. GD/C INVESTIGAT S. FALTORY EQUIPMENT OPERATING PROCEDURE WAS REVISED ID TO THE ERROMEOUS REJECTIONS AND REVISED PROCEDURE.	FOUND ADEQU PERATING PR JECTIONS AN	ATE. 60/0 OCEDURE 1 D REVISE	N S S	ESTIGATION AND EVISED TO INCL CEDUNE.	
	AUTOFILOT - SQUARE - A/B STRO PACKAGE	A-99-04-4322-F	FAR 87-45165-8	630313	FACTORY	7E\$ 50/0	5/0	
•	FAILURE MODE-OUT OF TOLERAM EEN R-3 AND THE MELD RIBBON:	FAILUNE MODE-OUT OF TOLERANCE. NO OUTPUT FROM SHEED SUBASSEMBLY NO. 1. FAILUNE CONFIRMED DUE TO POOR WELD JOINT SETM En R-3 and The Weld Ribbon.	SECMBLY NO. 1. PAILUME	CONFIRMED	DUE TO P	3 8	ELB JOINT BETW	
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	DIFFICULTIES REVIEW-AUTOFILOT STREEM-AIT-BORNE	PILOT SYSTEM-AITAOR	Z.		L		
BYBYEN BUB-BYBTEN	TEST/REPORT NUMBER PAILED COMPOMENT NAME	DIF DATA SOURCE PART MUMBER	VEHICLE DATE DIF	TIME DIF	PRI VENO	VENDOR MANE VENDOR PART NO	
CORRECTIVE ACTION-RECEIV	CELVING INSPECTION TEST METHODS WERE IMPROVED.	FROVEU.					
AUTOFILOT - SQUARE - A/B GTRO PACRASE	A-JA-04-4234-F CAPACI TORS	FAR 61-34018-088	630306	FACTORY	YES HF827CP24-8 NO	7CF24-8	*0*1*0*
FAILURE WOSE-OUT OF 3PEC FROM VEHICLE MARDWARE. TH	FAILURE MODE-OUT OF SPECIFICATION, 42 CAPACITORS WERE REJECTED FOR BEING OUT OF TOLERANCE. PARTS WERE NOT REJECTED ROW VEHICLE HARDMARIE. THIS TYPE CAPACITOR IS USED IN THE 6TRO CAN.	TED FOR BEIMG OUT O RO CAN. RING CAPACITANCE WE	F TOLERANC	E. PARTS .	A A	REJECTED	
CORRECTIVE ACTION MEEETS							
AUTOFILOT-SQUARE-A/B	A-09-04-4231-F 346D 318A53EMBLY TND	FAR 27-45186-5	630307	FACTORY	YES 60/0		* * * * * * * * * * * * * * * * * * * *
FAILURE MODE-OUT OF TOLENAME. O ED AND MODULE PEPFORMED MORMALLY. COMMETTIVE ACTION-MOME, PROCESS	TOLENAMLE. OUTPUT WAS TOO HIGH. SEVENAL BAD WELDS WERE FOUND DURING AMALYSIS. THESE MERE REPAIR ED HOPMALLY. WED HOPMALLY. THE FROCESS CONTROLS AND PERIODIC REVIEW OF PROCEDURES WAS CONSIDERED ADEQUATE.	BAD WELDS WERE FOUND OF PROCEDURES WAS	ND DURING	AMALYBIB.		CAE ACPAIR	
							20770
AUTOPILOT-URIMAE-A/B	A-90-04-423F ELAPSED TIME METER	FAR E7-4100E-855	630307	£	ğ		
FAILURE MODE-FAILED TO O	TO CPERATE AT PRESCRIBED TIME, ELAPSED TIME INDICATOR WAS INDPERATIVE.	TIME INDICATOR WAS	INDPERATITY	i			
CORRECTIVE ACTION-NOME.	FAILURE WAS NOT CONFIRMED.						
AUTOFILOT - BRUANE - A/B GYRO PACKAGE	AKA3-000\$-135F/FC-CO-01-0011-031 RZLAY	COMPOSTIE-PACTORY	135F	FACTORY	<u> </u>		*****
SYSTEM EFFECT-OPERATION TOO LOM-	700 LOM.						والمنافع وا
VEHICLE EFFECT-COMPOSITE	VEHICLE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE REITER RESUIRED.	INED.					
CORRECTIVE ACTION-A FAUL	FAULTY AGE RELATY, CAUSING ATTENUATION OF PITCH GYNO RESPONSE AND TORGUING SIGNALS, WAS REPLACED	F PITCH SYRO RESPON	18E AND TO	916 9HI08	Mats. W	. AEPLACED	············
	er gere einste den er geste den det an einste den eine der eine den der eine der eine der den eine der eine de	e de servicio de la company				PA6E 0359	1

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TATION COMPOSENT MANK A-89-DA-4117-F A-89-DA-418-F CANISTEN PRESSURIZATION BOSS A-89-DA-418-F		DITTICULIES ACTION	DIFFICULTIES REVIEW-AUTOFILOI STRIEM-AIRBORNE	2				_
A-89-D4-4147-F A-89-D4-4147-F B-STELPICATION. THE GING CANIBIEN TAN MATE GING SPIN-MOTOR ROTATION-DETECTOR CUTPUT WAS LON. AND E LOW CUTPUT TO A DEMANSTRIED WRD MASHET. SH-ND-04-4287F CANIBIEN PRESSURIZATION BOSS E7-41703-609 CANIBIEN PRESSURIZATION BOSS E7-41703-609 EXTERNAL. RUNDER MATE GROUP INTERFERENCE COLLD NOT BE MAINTAINED AT 14 PRIC. LEMANGE WAS THE STELMACH. RUNDER FOR INTERFERENCE COLLD NOT BE MAINTAINED AT 14 PRIC. LEMANGE WAS THE CEDING. TAL A BOSSS FOR IMET PRESSURIZATION VALVE. THE FAILURE WAS ATTRIBUTED TO A DEVIATION FROM THE CEDING. THE A-89-04-4162-F TOLEDANCE. THE GROOCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS MERE F OF TOLEDANCE. THE GROOCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS MERE F OF TOLEDANCE. THE GROOCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PACKAGE WAS THE STRAIN TO A HISCALIBRATED SIGNAL MAD TANDAR MATERIAL. THE DISPLACEMENT OF RECIDENCE FILED FAILURE FROM FLOW OF FLOWING WASTELY DISPLACEMENT. A-89-04-4250F A-89	#31878 #31878		DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	11 K 017	# 5	VENDOR MANE VENDOR PART NO	····
PRECIFICATION. THE STRO CANIBIER TAM RAIE 6TRO SPIN-MOTOR ROTATION-DETECTOR OUTPUT MAS LONG AND ELON OUTPUT TO A DEMANDETIZED BAND MACHET. SPEND-DA-4287F CANISTER PRESSURIZATION BOSS E7-41703-609 CANISTER PRESSURIZATION BOSS E7-41703-609 CANISTER PRESSURIZATION BOSS E7-41703-609 CANISTER PRESSURIZATION FROM THE COLD MOTOR E MAINIME FOR GO/C MADE PARTS. A-99-64-4182-F FTOLENANCE. THE GYROSCOPE PACKAGE WAS REJECTED WENT THE 2-DECAREE PITCH-DISPLACEMENT GAINS WERE F OF TOLENANCE. AND HANDLING REQUIREMENTS WERE INCORPORATED INTO APPLICABLE PROCEDURES. BAPPLES AND THE GYROSCOPE PACKAGE WAS REJECTED WENT THE 2-DECAREE PITCH-DISPLACEMENT GAINS WERE F OF TOLENANCE. AND HANDLING REQUIREMENTS WERE INCORPORATED INTO APPLICABLE PROCEDURES. BAPPLES AND THE GYROSCOPE PICKED FAILURE FROM TION OF PLANTATION MATRIALS. A-99-64-6207 A-99-64-62	AUTOFILOT-SQUARE-A/B	A-98-D4-4147-F 67RO-RATE/34RD	FAN 7-41015-867		FACTORY	¥ 0	> /9	
SA-80-DA-4247F SA-80-DA-4247F SA-80-DA-4247F CANISTER PRESSURIZATION BOSS 27-41703-609 CANISTER PRESSURIZATION BOSS 27-41703-609 CANISTER PRESSURIZATION POSS 27-41703-609 TAL AT BOSSES FOR IMET PRESSURIZATION VALVE. THE FAILURE WAS ATRIBUTED TO A DEVIATION FROM THE CEDURE. N-80-DA-4182-F A-80-DA-4182-F TOLERANCE. THE GYROSCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS WERE F OF TOLERANCE. THE GYROSCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS WERE F OF TOLERANCE. AMALYSIS COPIEMED THE REPORTED FAILURE AND ATRIBUTED IT TO A HISCALIBRATED SIGNAL. A-80-DA-4220F		ECIFICATION, THE GYRO CANISTER YA M OUTPUT TO A DENAGNETIZED BHND N	W RATE GYRO SPIN-MOTOR	R01A710N-D	ETECTOR	92 17	T MAS LOW. ANA	
EXTERMAL, RENOTE BATE GROUP INTERNAL PRESSURE COALD NOT BE MAINTAINED AT 14 PSIG. LEAKAGE WAS THR TAL AT BOSSES FOR INLET PRESSURIZATION VALVE. THE FAILURE WAS ATRIBUTED TO A DEVIATION FROM THE CEDURE. X-RAY INSPECTION OF ALL WELD JOINTS WAS INCORPORATED IN PLANNING FOR 6D/C MADE PARTS. A-99-04-4182-F A-99-04-4183-F A-99-04-4183-P A-99-04-4183-F A-99-04-4183-F A-99-04-41	CORRECTIVE ACTION-NONE AUTOFILOT-SAUARE-A/B GTRO PACKAGE		FAR E7-41703-609	630301	E	5 × 5	5/0 5	
A-99-04-4182-F TOLERANCE. THE GEROSCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS WERE F OF TOLERANCE. THE GEROSCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS WERE F OF TOLERANCE. AMALYSIS CONFIRMED THE REPORTED FAILURE AND ATTRIBUTED IT TO A HISAALIBRAED SIGNA 15 ALSO FOMD THE DISPLACEMENT GYROSCOPE FINED RESTRAINT DRIFT TO BE HIGH DUE TO A SEVERELY DISTO AD. ATED INTO THE GYSO WEAR THE FLEXIEADS TO PRECLUDE FAILURE FROM FLOW OF FLOATATION WATERIAL. A-99-04-42EOF FAR 6506-603 ANHLIFIER/TRANSISTOR TEST. TRANSISTOR BE, ARNORDA WAS POUND VIBRATION SENSITIVE. F TOLERANCE. FAILED VIBRATION TEST. TRANSISTOR BE, ARNORDA WAS FOUND VIBRATION SENSITIVE.	FAILURE MODE-LEAK-EXTE OUCH POROUS WELD METAL APPLICABLE WELD PROCEDU	PMAL, REHOTE RATE GROUP INTERNAL : AT BOASES FOR IMLET PRESSURIZATIONE. RE.	MESSURE COULD NOT BE H VALVE. THE FAILURE N	MAINTAINED AS ATRIBUT	74 14 EB TO A	16. L DEVIA	EAKAGE WAS THE TION FROM THE	
A-99-04-4182-F GTRO-DISALACEMENT T-41015-967 GTRO-DISALACEMENT T-41015-967 GS0301 FOURTHOLISPLACEMENT GAINS WERE F TOLERANCE. THE GYROSCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS WERE F OF TOLERANCE. AMALYSIS CONFIRMED THE REPORTED FAILURE AND ATTRIBUTED IT TO A MISCALIBRATED SIGNA 1S ALSO FOUND THE DISPLACEMENT GYROSCOPE FIXED RESTRAINT DRIFT TO BE HIGH DUE TO A SEVERELY DISTO AD	CORRECTIVE ACTION-X-RA		NS INCORPORATED IN PLA	HNING FOR 6	D/C MADE	PART	÷	
F TOLERANCE. THE GYROSCOPE PACKAGE WAS REJECTED WHEN THE 2-DEGREE PITCH-DISPLACEMENT GAINS WERE F OF TOLERANCE. ANALYSIS CONFIRMED THE REPORTED FAILURE AND ATTRIBUTED IT TO A MISCALIBRATED SIGNALS. 15 ALSO FOUND THE DISPLACEMENT GYROSCOPE FIXED RESTRAINT DRIFT TO BE HIGH DUE TO A SEVERELY DISTO AD. ATED INTO THE GYRO MEAR THE FLEXLEADS TO PRECLUDE FAILURE FROM FLOW OF FLOATATION MATERIAL. A-80-04-4220F ANGLIFIER/TRANSISTOR PAR 630227 FACTORY YES ANGLIFIER/TRANSISTOR TEST, TRANSISTOR SE, ARROEDA MAS FOUND VIBRATION SENSITIVE.	AUTOPILOT-SQUARE-A/B	1	FAR 7-41015-967	1830	FACTORY	ž Q		******
ATED INTO THE 6790 MEAR THE FLEXLEADS TO PRECLUDE FAILURE FROM PROFICABLE PROCEDURES. BAFFLES A-80-04-42EDF A-80-04-42EDF AND HANDING FAILURE FROM FLOW OF FLOW TELTION MATERIAL. FAR AND HOW FOLIATION TEST. TRANSISTON SE. AENDERA WAS FOUND VIBRATION SENSITIVE. PLEANEC. ENSERA REFLACED COMMENCIAL WERSTON FOR ALL APPLICATIONS.	FAILURE MODE-OUT OF TC OLAD TO DE MIGH OUT OF L AMPLIFICE. AMALYSIS A RTED PMASE-B FLEMLEAD.	ALERANCE. THE GYROSCOPE PACKAGE WA TOLERANCE. ANALYSIS CONTIFINED THE ILSO FOUND THE DISPLACEMENT GYROSC	S REJECTED WHEN THE 2-REPORTED FAILURE AND OPE FIXED RESTRAINT DR	DEGREE PITC ATTRIBUTED IFT TO BE H	H-BISPLA IT TO A IGH DUE	CENEN MISCA TO A	I GAINS MERE F LIBRATED SIGNA SEVERELY DISTO	
A-89-04-4220F AMPLIFIER/TRANSISTOR 27-41358-803 AMPLIFIER/TRANSISTOR E7-41358-803 F TOLERANCE. FAILED VIBRATION TEST, TRANSISTOR 8E, ARNSESA MAS FOUND VIBRATION SENSITIVE.	CORPECTIVE ACTION-MARK ARE BEING INCORPORATED	ALP, COOLDOMN, AND HANDLING REGUIR) INTO THE 6780 NEAR THE FLEXLEADS	EMENTS WERE INCORPORATE	ES INTO APP ROH FLOW OF	LICABLE FLOATAT	PROCE 10N R	DURES. BAFFLES ATERIAL:	
	NUTOPILOT-SQUARE-A/B	A-89-04-4220F ANGLITIEN/TRANSIBTOR	FAR 27-45358-803	6302E7	FACTORY	¥63		67 1288
COMBETTIVE ACTION-PIL-BPEC. PRIME MEPLACED COMMENCIAL VERSION FOR ALL APPLICATIONS.		MERANCE. FAILED VIBRATION TEST. T	RANSISTOR SE, AZHUZESA	MAS FOUND V	IBRATIC	35 24 25	. 1 1 VE.	
	CORRECTIVE ACTION-HIL-	PPEC.EMSEBA REPLACED COMMERCIAL V	ERSION FOR ALL APPLICA	110M8.				
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18 4UK 1866	DIFFICULTIES REVIEW-	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	a ic				
BUR-BYSTEN	TEST/REPORT HUMBER FAILED COMPONENT MAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	317E 71ME D1F	Z Z	VENDOR NAME VENDOR PART NO	
AUTOFILOT-BQUARE-A/B	M6-88-04-4800-F RATE 67R0	FAR 87-04574-8	1300	FACTORY	YES HONEYMELL	11	***************************************
FAILURE MODE-OUT OF T URE UNCOMPTHED.	F TOLERANCE. DURING RECEIVING INSPECTION TEST THE RATE GYRO FAILED THE DAMPENING RATIO TEST. FAIL	ION TEST THE RATE GYRC	FAILED THE	DAMPENI	46 RATIO 7E	1. FAIL	
CORRECTIVE ACTION-MOME.	E. CAUSE COULD NOT BE DETERMINED.				A PROPERTY AND PRO		
AUTOFILOT-SQUARE-A/B	A-59-04-4146-F 3-80/MIRING	FAR 7-41013-967	1770 6302ES	FACTORY	YES 60/C		100
FAILURE MODE-FAIL TO ON-DETECTOR CIRCUITRY. UE TO THREE FAULTY MEL	FAILURE MODE-FAIL TO OPERATF AT PRESCRIBED TIME, THE GYRO CANISTER FAILED WITH NO CUTPUT FROM THE SPIN-MOTOR ROTATI ON-DETECTOR CIRCUITRY, AMALYSIS FOUND THAT THE SHWD MODULE MOULD FAIL WHEN SUBJECTED TO MEATING AND COOLING CYCLES D UE TO THREE FAULTY WELD JOINTS.	RO CANISTER FAILED WIT LE WOULD FAIL WHEN BUI	N NO OUTPUT	EATING A	E 8FIN-HOTO 40 COOLINE	R ROTATI CYCLES D	
CORRECTIVE ACTION-UNKNOWN.	NOM.						······••
AUTOFILOT-SQUARE-A/B	A-09-04-4273F HEATER RING	FAR 7-41917-8	630225	FACTORY	YES 50/C		10380F
FAILURE MODE-FAIL DUR	DURING CPETATION. HEATER RING FAILED AFTER INSTALLATION AND MARHUP IN A GYRO CAN.	AFTER INSTALLATION AND	MARHUP IN	A 67RO C	į		
CORRECTIVE ACTION-NONE.	C. FAILURE NOT CONTRHED.						
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-90-04-4178-F GYRO-DIBPLACEMENI-HEATER	FAR 27-41002-455	630EES	<u> </u>	5 Q		
PATLURE-WONE-ELECTRIC HEATER WINDING BROKEN	FAILURE MODE-ELECTRICAL-OPEN. THE PITCH DISPLACEMENT GYROSCOPE FINE HEATER WAS NOT OPERATING. FAILURE WAS CAUSED BY HEATER WAS DOCKRATING. FAILURE WAS CAUSED BY HEATER WINDING BROKEN AT A SPLICE POINT DUE TO WIRE PLEXING.	POSCOPE PINE HEATER WATER WA	IS NOT OPERA	¥ .	ורתעני איז כ	AUSED BY	and the second
CORRECTIVE ACTION-REA	REARFOTT CHANGED THE GLUE WHICH HOLDS THE WIRES IN PLACE.	THE WIRES IN PLACE.					
AUTOP11.0T-BRURE-A/B GYRO PACKAGE	8#-88-04-4181-F 8+80-FILTER-ELECT-15CAL	7AR #7-04948-#	2240 630223	FACTORY	YES ACT		
FAILURE MOSE-OUT OF T TAIR CONCLUDED THE FILL	FAILURE MOCE-OUT OF TOLERANCE. THE BFIM-MOTOR ROTATION DETECTOR METHORK FILTER REPORTEDLY FAILED ON CHANNEL &. ANAL SAFE CONCLUDED THE FILTER DID MOT ACTUALLY FAIL BECAUSE IT MET THE SPECS APPLICABLE AT THE TIME OF PUNCHASE. THE MAT	DETECTOR HETWORK FILTI IT MET THE SPECS APPL	ER REPORTEDI ICABLE AT TH	TAILED	ON CHANNEL	IL E. ANAL.	······································
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DIFFICULTIES REVIEW-AUTOFILOT BYSTEM-AIRBORNE

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VEHICLE ATTE PRI VENDOR MANE DATE DIP TINE DIP OTH VENDOR PART NO			YES HIMMEAPOLIS-HO NO MEYWELL JRS101AZ	NER VINDING L			RACED TO THE	F THE PAILURE	YES HONEYNELL NO	N SIGNAL GENE	SPECTION TECH	3/ 09	ER HAD BURNED GYRO CAM,
INE DIF OTH	MA US			HE TON		¥ 6	2 th 3 t	CAUSE O	7 O	LECT) 11 RATOR W	OVED IN	2 O	ANSFORM TO THE
TINE DI	HERE 17		FACTORY	O HAVE &	. 50	FACTORY	TROUBLE	F. 74	Ĕ	OPEN (E)	MINATIO	8478	HER. TR
VEHICLE DATE DIF	O CHAMMEL 1		135F #302£1	WINCING TO	HE OVER THE	1357	HEN HEASED. PEARED.	C THE HODIA	188D 430219	MED BUC TO OF THE BISA	POXY BOND A	630E18	OR TRANSFOR
DIF DATA SOURCE PART NUMBER	PATIBLE WITH THE BIR		FAR 27-04574-3	E SHOKED THE TORGUES	IT BOLDER PROH SPILLS	FAR E7-43166-3	OULD NOT CALIBRATE WOTTING TROUBLE DISAM	LOST AFTER DEPOTTIN	FAR 87-44554-15	IFUT, FAILURE CONFIR H ENCAPSULATED PART (IATED PULL TEST ON EF ESS OF THE EPOXY BONE RE ALSO INCORPORATED	7AR R7-41008-035	FOR AN OPEN BPIN HOTO T OR OPEN ON THREE PA
TEST/REPORT NUMBER FAILED COMPONENT NAME	LURE INDICATES THE FILTER WAS INCOMPATIBLE WITH THE SMID CHANNEL WHERE IT WAS USED.		A-99-04-4168-F Rate byro-varing	FAILURE WODE-SHORT, A RESISTANCE CHECK OF A RATE GYROSCOPE SHOKED THE TORGUCA WINCING TO HAVE 27.8 OHMS INSTEAD OF THE WORMAL 340 TO 390 OHMS, THE SHORT WAS CAUSED BY A SPLASH OF SOLDER FLOWING OVER THE END OF THE TORGUER WINDING LEAD FERRULE TO GROUND.	CORRECTIVE ACTION-VENDOR INCREASED FERRULE SIZE TO PREVENT SOLDER FROM SPILLING OVER THE END.	A-89-04-4208-F 3480	FAILURE MODE-OUT OF TOLERANCE. THE GYRO SELF-CHECK UNIT WOULD NOT CALIBRATE WHEN HEAIED, TROUBLE WAS TRACED TO THE CHHIDT TRIGGER MODULE WHICH WAS HEAT SENSITIVE, AFTER DEPOTTING TROUBLE DISAPPEARED.	CORRECTIVE ACTION-REPORTED FAILURE WAS CONFIRMED, BUT WAS LOST AFTER DEPOTTING THE MODULE. THE CAUSE OF THE FAILURE WAS UNDESCLIED. NO CURRECTIVE ACTION TAKEN.	NZ-2D-D4-4313-F RATE STRO SEMERATOR	FAILURE HODE-ELECTRICAL OPEN, ROLL RATE GYRO SHOMED MO OUTPUT. FAILURE CONFIRMED DUE 10 OPEN (ELECT) IN SIGNAL GENE Ator wincing. Cause of Failure sam infroper assenbly which encapsulated part of the bismal generator minding in the Epoxy Bond.	CORRECTIVE ACTION-VENDOR BC NETHODS REVIEWED. VENDOR INITIATED PULL TEST ON EPOXY BOND AND IMPROVED INSPECTION TECH NIBUES BY 100-PERCENT INSPECTION OF SPIN HOTORS POR SOUNDHESS OF THE EPOXY BOND AND CONTAMINATION OF THE ENDS OF THE GIMBAL. HY-POT INSULATION AND WINDING RESISTANCE TESTS MENE ALSO INCORPORATED.	A-OX-4E38F BFIN MOTOR TRANSFORMER	FAILUME MODE-OFEN ELECTRICAL, MAIN GYRO CAN MAB REJECTED FOR AN OPEN BFIN HOTON TRANSFORMER. TRANSFORMER HAD BUNNED WINDINGS AND CRACKED CARE, FAILURE MAB ATTRIBUTED TO SHORT OR OPEN ON THREE PHASE LING EXTERNAL TO THE GYRO CAN,
ATATES BUB-BYSTES	URE OF THE REPORTED FAILU	CORRECTIVE ACTION-NOME.	AUTOFILOT-SAURE-A/B STRO PACKAGE	FAILURE MODE-SHORT, A RE THE MORNAL 340 TO 390 GHM EAD FERRULE TO GROUND.	CORRECTIVE ACTION-VENDOR	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLE VCHNIDT TRIGGER MODULE NA	CORRECTIVE ACTION-REPORTED PAILURE WAS COM-	AUTOPILOT-SQUARE-A/B	FAILURE HODE-ELECTRICAL (RATOR WINCING, CAUSE OF F. EPONY BOND.	CORRECTIVE ACTION-VENDOR NIGHER BY 100-PERCENT INSIGEMENT OF INSULATION	AUTOFILOT-BEUARE-A/B STRO PACRACE	FAILURE MODE-OPEN ELECTRI

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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	818 - 818 ER	PAILED COMPONENT NAME	PART NUMBER	DATE DIF	DATE DIF TIME DIF	OTH V	ART NO	

	CORRECTIVE ACTION-NOME.	CAUSE OF DAMAGE WAS NOT LEARNED.						
	AUTOFILOT-SQUARE-A/B	58-88-04-4194-F RATE 67RO 84RD	FAR E7-41708-609	1970 630215	FACTORY	7ES 60/C		
	FAILURE MODE-FAIL DURING OPERATION ATE GYRO SMED CIRCUIT WHEN MONITCRED D BUT THE CAUSE COULD NOT BE FOUND.	FAILURE HODE-FAIL DURING OPERATION. THE RENOTE THREE-RATE GYROSCOPE GROUP REPORTEDLY HAD NO OUTPUT FROM THE PITCH-R ATE GYRO SHAD CIRCUIT WHEN HONITORED AT JE PINGU OF THE DIBPLACEMENT GYRO PACKAGE. THE REPORTED FAILURE HAS CONTINE D BUT THE CAUSE COULD HOT BE FOUND.	BYROSCOPE GROUP REP PLACEMENT GYRO PACK	JATEDLY HAS IGE: THE RI	NO OUTP	UT FROM THE PARTIES CO	ITCH-R	
	CORRECTIVE ACTION-MONE.							
	AUTOFILOT-DAUARE-A/B	A-19-04-4148-F 6480-RATE	FAR 7-41015-967	1770	FACTORY	8 8		•
	FAILURE HODE-OUT OF SPEC UT AFEA, AMALYSIS INDICAT PECIFICATION, FAILURE IND	OF SPECIFICATION. THE GYRO CANISTER EXHIBITED LOW YAW RATE GYRO OUTPUT IN THE MISSILE FINAL CHECKO INDICATED THAT ALL READINGS WERE ON THE LOW SIDE BUT WITHIN E PERCENT OF NOMINAL WHICH IS WITHIN S UME INDICATIONS WERE CAUSED BY A BUILDUP OF PACKAGE AND TEST SET TOLERANCES.	ITED LOW YAW RATE GO THE BUT WITHEN OF PACKAGE AND TEBT	FRO CUTPUT P PERCENT (IN THE HI OF NOHINAL MICES.	ISSILE PINAL. L'MICH IS W	CHECKO THIN B	
	CORRECTIVE ACTION-A LETT PARAKETERS TO A POINT CO	CORRECTIVE ACTION-A LETTER WAS SENT TO THE AIR FORCE OFFICE AT GD/C REQUESTING PERHISSION TO EXPAND THE SYSTEM TEST PARAMETERS TO A POINT COMPARABLE WITH THE FIELD PARAMETERS. THIS WOLLD TAKE INTO ACCOUNT THE BUILDUP OF TOLERANCED.	E AT GD/C REQUESTING. THIS WOULD TAKE II	FERHISSIC	N TO EXP.	AND THE SYSTE	SYSTEM TEST TOLERANCED.	
	AUTOFILOT - SAUARE - AZE GYRO PACKASE	A-99-04-4163-F SHED CIRCUIT BOARD	FAR 27-43229-3	87F 830214	FACTORY	22		•
	FAILURE HODE-OUT OF TOLE LD NOT COMPIEM A FAILURE RENSITIVE. BCE FAR A-98-D	FAILURE HODE-OUT OF TOLERANCE. THE SHED CIRCUIT BOARD CHANNELS 3 AND 5 HERE REPORTEDLY HEAT SEMBITIVE. AMALYSIS COU LD HOT COMFIRM A FAILURE OF THIS CIRCUIT BOARD. HOMEWER, THE MATING CIRCUIT BOARD 27-43250-501 HAS FOUND TO BE MEAT SENSITIVE. SEE FAR A-98-04-4184F.	NELS S AND S MERE RE E MATING CIRCUIT BO	EPORTEDLY I	EAT SENS	TTIVE. ANALYS	IS COU	•
-	CORRECTIVE ACTION-NOME.			·				
	AUTOFILOT-SQUARE-A/B SYRU PACKASE	A-89-G4-4184-F BAMD CIRCUIT BOARD	FAR RY-43830-601	67F 630£14	FACTORY	2 G		
1	FAILURE HODE-OUT OF TOLE COULD HOT COMPERN FAILURE PECTIVE MELD JOINT IN BUB	OF TOLERANCE, THE SMAD CIRCUIT BOARD CHANNELS T, 8 AND S NERE REPORTEDLY HEAT SENSITIVE, ANALYSIS Failumes of Channels T, 8 and S. Homever, Channel & Was Found to be heat sensitive because of a de In subassembly 1, 27-48185-8,	NELS T, S AND S NER CHANNEL S NAS FOUN	E KEPORTEDI D TO SE HE	LY MEAT SI	ENSITIVE, ANA IVE BECAUSE O	LY313	
						344	PAGE 0333	

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	VENDOR NAME VENDOR PART NO		TES HONETNELL NO VRSIGIAE	EMBLY WEN THE STRATION.		INGING AC GAIN, ITOR NOT DETERM AT LOW COLLECT THE TRANSISTO	YES 60/C	NY ACCEPTANCE FINE AT 30 ACED BY AN IMP	PACE 0364
	T T T		7 6	7 AS: WOLT/ P VIE	334R	ANSIS SEED OF SEED OF	ž 9	7 ACT 6	
	817E 71ME DIF		FACTORY	THE NELL BY HOTO	FACTORY	ED DUE TA AULTY TR AULTY TR EN RECET	FACTORY	TANDARD OF SHED BOTH THE NAME	
¥	VEHICLE DATE DIF		630212	G TESTS OF LY DROVE ' ENT CAUSEI	630212	RE CONFIRM CAUSE OF P FECTIVE WATHAT DAMA ECTOR CURP	63021E	ENTS OF S	
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	DIF DATA BOURCE PART NUMBER		FAR 27-04574-3	ED DIRING MANUFACTURIN ATION, THIS OCCASIONAL D LATERAL GINBAL MOVEM 1983, TO BRING THE MUL	FAR E7-43100-3	THE SCHIDRATION, FAILU THE SCHMITT TRIGGER. THE TRANSISTOR WAS DEI WAS NOT SPECIFIED OR LE AC GAIN AT LOM COLLI.	FAR R7-45106-5	AILED TO MEET REQUIRE PROCEDURE. ME TO PROVIDE FOR CAL PRENT USED TO CHECK BI	
DIFFICULTIES REVIEW-A	TEST/REPORT NUMBER FAILED COMPONENT NAME		SP-99-04-4144-F GYRO-RATE/MOTOR	FAILURE MODE-ERRATIC OPERATION, THE RATE GYRO WAS REJECTED DURING MANUFACTURING TESTS ON THE MENT ASSEMBLY WHEN THE MULL OUTPUT YOLIAGE WAS OBSERVED TO CONTAIN A E CPS VARIATION. THIS OCCASIONALLY DROVE THE MULL WITAGE WAS OBSERVED TO CONTAIN A E CPS VARIATION. ECIFICATION LIMIT OF 25MY. AMALYSIS ATTRIBUTED FAILURE TO LATERAL GIMBAL MOVEMENT CAUSED BY MOTOR VIBRATION. CORRECTIVE ACTION-THE GYRO WAS RETRIMED ON FEBRUARY ES,1963, TO BRING THE MULL MITHIN SPECIFICATIONS. SINCE MULL O	UTPUT VARIATION CANNOT, IN ITSELF, BE REGARDED AS A FAILURE, NO FURTHER ACTION IS CONSIDERED MECESSARY. UTCHILOT-SQUARE-A/B A-98-04-4330-F FAR 630212 FACTORY YES THO PACKAGE 894ED TRANSISTOR R7-43180-3 NO	FAILURE MODE-DRIFT, SWED SUBASSEDBLY FAILED TO MAINTAIN ITS CALIBRATICM, FAILURE CONFIRMED DUE TO CHANGING AC GAIN, AT LOW COLLECTOR CURRENTS, OF THE FIRST OF THE SCHMITT TRIGGER. CAUSE OF FAULTY TRANSISTOR NOT DETERM MED. CORRECTIVE ACTION-NOME, BECAUSE IT MAS NOT KNOWN WHETHER THE TRANSISTOR WAS DEFECTIVE WHEN RECEIVED, AT LOW COLLECT RECERSES, SINCE GAIN AT A COLLECTOR CURRENT OF D.45 MA WAS NOT SPECIFIED OR THAT DAMAGE OCCURRED TO THE TRANSISTO DURING SUBASSEMBLY CONSTRUCTION, RESULTING IN AN UNSTABLE AC GAIN AT LOW COLLECTOR CURRENTS.	A-89-04-4310-F SHRD AMPLIFIER	FAILUME MODE-OUT OF TOLERANCE, THREE SHAD SUBASSENDLIES FAILED TO HEET REQUIREMENTS OF STANDARD FACTORY ACCEPTANCE PROCEDURE, FAILURE CONFISHED DUE TO AMBIGUOUS CALIBRATION PROCEDURE. CORRECTIVE ACTION-60/C CHANGED FACTORY ACCEPTANCE PROCEDURE TO PROVIDE FOR CALIBRATION OF SHAD SUBASSEMBLIES AT 30 PLUS D.S VDC. INSTEAD OF 25 VDC FACTORY TEST EQUIPMENT USED TO CHECK SHAD COMPONENTS WAS REFLACED BY AN IMP	
9981 NOT 81	8747EX 808-8787EX	CORRECTIVE ACTION-NOME,	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-ERRATIC OPEN MALL OUTPUT VOLTAGE MAS CHECIFICATION LIMIT OF 25M CORRECTIVE ACTION-THE \$71	UTPUT VARIATION CANNOT, IN AUTOFILOT-BOURE-A/B GFRO PACKAGE	FAILURE MODE-DRIFT, SWED AT LOM COLLECTOR CURRENTI INED. CORRECTIVE ACTION-MOME, E OR CURRENTS, SINCE GAIN AT	AUTOFILOT - SQUARE - A/B GYRO PACKAGE	PATLUME MODE-OUT OF TOLER PROCEDURE, FAILURE CONFIZH CORRECTIVE ACTION-60/C CH	ROYED DEBICAL

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DIFFICULTIES REVIEW-AUTOFILO" SYSTEM-SINBORNE

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BITE PRI VENDOR MANE TIME DIP OTH VENDOR PART NO	T EXHIBITED NON DR END OF THE P EPEATING.	GO/C EQUIPMENT IN TH HEIR INSTALLATI	69/C	FOUND BETWEEN THE WIDERICE LEVEL OF
4 O X	TEDL TEDL	5 5 5 E	TES TO BUTED	
17 TIME 01	ETR CKAGE REPO SIGNAL GE! ONCE WITH	FACTORY THE APCHE	FACTORY	FACTORY WEN WELD W S MADE: A C MODULES:
VEHICLE DATE DIF	134F 630206 09E PA 14T THE 1CT1 ON	1770 830207 1NTO	11EMS 45F 630207	PROZOCOS PROSECTION OF THE NEW THE
DIF DATA BOURCE PART NUMBER	ET-4100E-883 ET-4100E-883 ET-410E-883 ETEST VALUE: THE GYROSCO	FAR 7-41015-987 0 A LOM VOLTAGE OUTPUT TORS R-107 AND R-113 W ETRY ENITTER FOLLOMER.	MSEQUENCES OF ALLOWING FAR E7-43186-3 MMEL 1 GUTPUT TOO HEEH	FAR E7-43189-3 MODULE HAD NO OUTFUT. MANUFACTURING OPERATIONS OF
TEST/REPORT NUMBER FAILED COMPONENT MAME	UIGHILOT-BRUNE-A/B A-98-04-4179-F FAR 134F ETR YES MO-DISPLACEMENT RY-4100R-893 830R08 MO	UNCORRECTIVE ACTION-NOME. UNCORTOR A A A S - CA - A 133 - F THO PACKAGE CIRCUIT BCARD/RESISTCA THO PACKAGE CIRCUIT BCARD/RESISTCA THO PACKAGE CIRCUIT BCARD/RESISTCA THOSE HODE-OU! T SPECIFICATION, GYRO CANISTER EXHIBITED A LOW VOLTAGE OUTPUT INTO THE APOHE TEST EQUIPMENT IN THE ENISSILE FIRML OMECKOUT AREA, TERMINAL BOARD TB - 104 RESISTORS R - 107 AND R - 113 MERE INTERCHANGED IN THEIR INSTALLATION. THESE RESISTORS ARE IN THE OUTPUT CIRCUIT OF THE TELEMETRY EMITTER FOLLOMER.	CORRECTIVE ACTION-IMAPECTORS WERE RENINDED OF THE DIME COMSEQUENCES OF ALLOWING STEMS SUCH AS THIS TO GET PAST THEIS STATION. FAR 45F FACTORY TES 6D/C RO PACKAGE SHED/CIRCUIT BOARD E7-43186-3 830207 NO FAILURE HODE-OUT OF TOLERANCE. THE MODULE PAILED MITH CHANNEL 1 OUTPUT TOO HIGH. AMALYSIS ATTRIBUTED FAILURE TO A B D MCLD JOINT ON PIN 4.	CORRECTIVE ACTION-MOME. TOPILLOT-SQUARE-A/B A-69-04-4443-F TOPILLOT-SQUARE-A/B A-69-04-44-45-F TOPILLOT-SQUARE-A/B A-69-04-44-1-F TOPILLOT-SQUARE-A/B A-69-04-44-1-F TOPILLOT-SQUARE-A/B A-69-04-44-1-F TOPILLOT-SQUARE-A/B A-69-04-44-1-F TOPILLOT-SQUARE-A/B A-69-04-44-1-F TOPILLOT-SQUARE-A/B A-69-04-44-1-F TOPILLOT-SQUARE-A/B A-69-04-1-F TOPILLOT-SQUARE-A/B A-69-04-1-F TOPILLOT-SQUARE-A/B A-69-04-1-F TOPILLOT-SQUARE-A/B A-69-04-1-F TOPILLOT-SQUARE-A/B A-69-04-1-F TOPILLOT-S
BYBIEM BUB-BYBIEM	AUTOPILOT-BRUNE-A/B STRO PACKAGE FAILURE MODE-OUT OF SPEC -LINEAR TORGUIMS, AMALTSI LOAT CAN SHOWED BIGHS OF	CORRECTIVE ACTION-NOME. AUTOFILOT-SQUARE-A/B GYRO PACKAGE FAILUKE MODE-OU! T SPEC: E MISSILE FISHL OPECKOUT ON. THESE RESISTORS ARE 1	COREC JIVE ACTION-INSPEC R STATION. AUTOPILOT-SQUARE-A/B GTRO PACKAGE FAILURE MODE-OUT OF TOLE AD MELD JOINT ON PIN 4.	CORRECTIVE ACTION-MOME. AUTOPILOT-SQUARE-A/B GVRO PACKAGE FAILURE MODE-FAIL TO OPE JUNCTION OF DIODE CR-3 A CORRECTIVE ACTION-A REVI

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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VENDOR NAME VENDOR PART NO		FAILURE COMF	YES 60/C	HALF-WAVE RECT ARAGE RATE WIT TOWN RESISTOR	LEN THE CAPACE	5/09	FAFTER ES MINU JH-AMAY OF TRAN	J/05	3 JOINT IN THE	PAGE 0306
# O # E	₹ ₹	AMMEL CICHI	20	141. 14. L	een	ž č	OUTPUT MAL RI T SIM	ž 0	MELDES	
VEHICLE BITE PRI DATE DIF TINE DIF OTH	ALTUS.	IN YAN O	FACTORY	HAD A PAR A VERY HI	EPARA TICO	FACTORY	VOLTAGE (). A THERI	7ACTORY	ROPERLY (
VEHICLE DATE DIF	630206	JING GAIN ME CORNER D ADEGUAT	630206	ECK UNIT C-1 HAD C-1 SHORT	URE THE 1	630203	INPLIFIER LAT SINKER ES OF IMPR	820508	DED BY 1M	
DIF DATA SOUNCE PART NUMBER	FAR 27-45045-809	OLT OF TOLERANCE TORBUING GAIN IN YAM CHANNEL. FAILURE CON, THE GYRO PACKAGE ON ONE CORNER FROM A MEIGHT ABOVE TESTED WERE REVIEWED AND FOUND ADEQUATE. BUFFICIENT CAUTION NOTES PACKAGES MERE INCLUED.	FAR 27-43188-3	THE GYROSCOPE BELF CH PHINED THAT CAPACITOR RIBUTED TO CAPACITOR	USING A GAGE TO MEAS	FAR 7-41014-567	IBITED A LOW BIGNAL A GB WAS IMPROPERLY H OUTPUT. E AND THE CONSEQUENCE	FAR 87-43835-9	ENT. FAILURE MAS CAU! HOT COMPLETE *HEN TI	
TEST/REPORT HUMBER FAILED COMPONENT NAME	A-8N-04-4088-F 6YAO-RATE	RACE ENIBITED BY DROPPING TO THE PACKAGE		FAILURE MODE-ELECTRICAL SHORT, A MODULE MHICH IS PART OF THE GYROSCOPE BELF CHECK UNIT HAD A PARTIAL HALF-WAVE RECT FFIED CUTPUT INSTEAD OF FULL-WAVE RECTIFIED. AMALYBIS DETERMINED THAT CARACITOR C-1 HAD A VERY HIGH LEARAGE RATE WHI CH UPSET THE BIAS OF TRANSISTOR 0-1, NODULE FAILURE IS ATTRIBUTED TO CAPACITOR C-1 SHORT CIRCUITING AROUND RESISTOR R-1.	CORECTIVE ACTION-INSPECTION AND PRODUCTION PERSONNEL ARE USING A GAGE TO MEASURE THE SEPARATION BETWEEN THE CAPACI OR AND RESISTOR LEADS.	A-A9-04-4136-F AMPLIFIER/TRANSISTOR	FAILURE MODE-FAIL DURING CRERATION. THE GYRO CANISTER EXHIBITED A LOW BIGNAL ANPLIFIER VOLTAGE CUTPUT AFTER ES TES OF OPERATION. THE YAM GYRO SIGNAL ANPLIFIER FRANSISTOR 68 WAS IMPROPERLY HEAT BINKED. A THERMAL RUM-AWAY OF BIBTOR CAUSED THE ANTLIFIER TO OSCILLATE AND EXHIBIT A LOW CUTPUT. CORRECTIVE ACTION-INSPECTORS WERE INFORMED OF THIS FAILURE AND THE CONSEQUENCES OF IMPROPER HEAT SIMES.	NZ-99-04-4244F 8460	FAILURE MODE-ERRATIC OPERATION, SHED OUTPUT MAS INTERNITTENT. FAILURE MAS CAUSED BY IMPROPERLY MELDED JOINT IN THE MAD SUBARSEMBLY TWO. COMRECTIVE ACTION-MOME, MELDERS CERTIFICATION PROGRAM MAS NOT COMPLETE "MEN THIS UNIT MAS ASSE, BLED.	
87.87EH 848-8787EH	AUTOFILOT-SQUARE-A/B	FAILURE MODE-STRUCTURAL FAILURE, 67RO PACINED DUC TO BENT TORSION BARS IN 67RO CAULINITS. CHUMAN INITIATED FAILURE). CORRECTIVE ACTION-TECH ONDERS APPLICABLE	AUTOFILOT-SQUARE-A/B	FAILURE MODE-ELECTRICAL IFIED GUTPUT INSTEAD OF F CH UPSET THE BIAS OF TRAN	CORRECTIVE ACTION-INSPECTOR AND RESISTOR LEADS.	AUTOPILOT-SQUARE-A/B GYRO PACKACE	FAILURE MODE-FAIL DURING TES OF OPERATION, THE YAM BISTOR CAUSED THE AMPLIFI CORRECTIVE ACTION-INSPEC	AUTOPILOT-BRUARE-5/18 GTRO PACKASE	FAILURE MODE-ERRATIC OPE BAND SUPASSEMBLY TWO, CORRECTIVE ACTION-MOME.	

#31678-004	TESTARFORT NUMBER FAILED CONFORMT NAME	BIF DATA BOUNCE PART NUMBER	VEHICLE BITE	31.16	PRI VENDOR NAME	Г
AUTOFILOT-BRUNK-A/B	A-69-04-4205-F	FAR 87-43523-3	1370	FACTORY Y	VER GOVC	903072
FAILURE MODE-OUT OF TOLES OMFIRMED DUE TO TEMPERATI M MAS LOST WHEN SUDASSEM	FAILURE MODE-OUT OF TOLERANCE, SPIN MOTOR ROTATION DETECTOR (SHRD) SHOWED NO OUTBUT FROM CHANNELS 1 AND 2. COMPIRMED DUE TO TEMPERATURE SENSITIVE SUBASSEMBLIES NO. 2. CAUSE OF FAILURE NOT DETERMINED SECAUSE FAILURE ON MAS LOST WHEN SUBASSEMBLIES WERE DEPOTIED.	R (&HRD) SHOWED NO C CAUSE OF PAILURE NO	UTHUT FROM OF DETERMENTED	HANNELS :	AND E. FAILURE FAILURE INDICATE	-
ORECTIVE ACTION-NO POSITION TO DEPOTITING, EXTENSI	FORECTIVE ACTION-NO POSITIVE CORRECTIVE ACTION TAKEN SINCE FAILURE MAS TAMESOLVED. ALTHOUGH FAILURE MODE EXISTED P WIOR TO DEPOITING, EXTENSIVE TEMPERATURE TESTS AFTER DEPOITING FAILURE MAS THE FAILURE MODE EXISTED P	FAILURE WAS CAMESON NG FAILED TO RE-EST	WED. ALTHOU BLISH THE F	SH FAILUR VICURE NO	E HODE EXISTED P	
STRO PACKAGE	A-08-04-4159-F FTRO-RATE \$480	FAR E7-45045-805	\$C0201 \$C	SCHILLIN YES 60/C	3/05 t	*
FAILURE MODE-OUT OF MECTF	CIFICATION. THE THO-RATE GTRO PACRAGE HAD A LOW BPIN-HOTOR ROTATION-DETECTOR OUTPUT.	E HAD A LOW BPIN-NOT	M ROTATION-	DETECTOR	OUTPUT.	
NOVE.				•		•
AUTO'ILOY-SQUARE-A/B P. 67RJ PACKAGE H	FAR HG-00-D4-4112-F HARRESS	FAR 67-41356-619	6302UO FAC	FACTORY NO	60/E	*****
FALLURE MODE-BTRUCTURAL, MC BUENT TEARDOWN PASPECTION RE	NO FAILURE REPORTED. HARNESS TRAY HAS REMOVED TO BE REPLACED REVEALED A PIECE OF HETAL IL PART OF THE POTTING HOLD) I S/8	HAS REMOVED TO BE REPLACED WITH A NEW DESIGN TRAY, SUBSECT THE POTITING MOLD) I S/8 X 3/8 UNDER A WIRE BURDLE,	ACED WITH A	NEW DEST	MITH A NEW DESIGN TRAY, SUBSE X 3/9 UNDER A WIRE BUNDLE,	
CORECTIVE ACTION-PLABILE P. L. MJ-DS CAN RE ELIMINATED.	CORRECTIVE ACTION-PLABITG POTTING MOLDS WILL SE USED INSTEAD OF METAL MOLDS. THIR IS INTERIN CORRECTIVE ACTION UNTE	OF HETAL MOLDS, THES	IS INTERIM	CORRECTI	VC ACTION UNTI	
AUTOPILOT BOUME "AND A". 6780 PACKAGE	A-AR-04-4080-F	FAR 17	1770 FACTORY 630130	7 7 7 2 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		*****
FAILURE MODE-FAIL TO OMERATE D DIODE.	IATE, MO OUTPUT FROM YAN, LIBPLACEMENT GYRO BMMD. FAILURE COMPIRMED DUE TO INTERNALLY BMORTE	GYRO MAND. PAILURE	CONFIRMED DU	THI OL 3	BHALLY BOORTE	
CONAÉCTIVE ACTION-VENDOR CON	CONTACTED-SAND CIRCUIT REDESIGNED TOTHPROVE OPERACION,	HPROVE OPERACION.	i de			
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o devices resultantes and the second control of the second second second second second second second second se	de des des des des des des des des des d	erimentaram and administrative states are t memographic of			PASE 0387	

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AUTOFILOT-SQUARE-A/B						
ETRO PACKAGE	A-90-04-4104-F	FAR R7-40100-2	74E 630130	PACTORY	FACTORY TES GO/C	9,443
FAILURE HODE-FAIL DURING OPERAT NFIRMED BY AMALTAIS, A COMPLETE : D FOR ANALTAIS, ONLY THE MODULE,	FAILURE HODE-FAIL DURING OPGRATION, THE SHAD MODULE REPORTEDY WOULD NOT CALIBRATE. THIS REPORTED FAILURE MAS HOT CO FIRNED BY AMALYSIS, A COMPLETE FAILURE AMALYSIS COULD NOT BE PERFORMED BECAUSE THE COMPLETE CIRCUIT MAS NOT RECEIVE) FOR AMALYSIS, OMAY THE MODULE,	PORTEDY WOULD NOT CALIB NOT BE PERFORMED BECAUM	RATE, THIS E THE COMPL	REPORTED ETE CIRCI	FAILURE MAS NOT CO	
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME, FAILURE NOT CONFIRMED.				al managan delikan gerapa pengangan pengangan pengangan pengangan pengangan pengangan pengangan pengangan peng	1
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-86-04-4314-F DISPLACEMENT 67RO 94RD	FAR 27-41002-835	75F 630130	BTCAMORE	STCAMORE YES REARFOLT NO	••••
FALLURE MODE-ELECTRICAL MRD FLEXLEAD SLIPPING OF P.	FAILURE MODE-ELECTRICAL OPEN. DURING PRECOUNTDOWN CNECKOUT GYRO SMRD NO-GO WAS RECEIVED. FAILURE CONFIRMED DUE TO S RD FLEXLEAD SLIPPING OFF THE BINDING POST. LEAD MOST PROBABLY SLIPPED OFF POST BECAUSE OF ENLARGEMENT OF SPRING CLI.	KOUT GYRO SHRID NO-GO HA ROBABLY BLIPPED OFF POS	S RECEIVED. T BECAUSE O	FAILURE F ENLARG	COMPIRMED DUE TO S HENT OF SPRING CLI	
CORRECTIVE ACTION-VENDOR OC MEASURES REVIEMED. ON TO INSURE CORRECT SEATING OF SURD FLEXIEADS. E THE REPORTED DISCREMENT IS AN INOLATED CASE.		WENDOR IMPLEMENTED 100-PERCENT INSPECTION UNDER ED-POWER MAGNIFICATI WENDOR PERFORMANCE RECORDS ON 1500 GTROS WITH SWRD FLEXLEADS INDICAT	1800 67808	UNDER RI	FLEXLEADS INDICATE	
AUTOPILOT-SAUARE-A/B GTRO PACKAGE	A-99-04-4197-F	FAR E7-43588-9	135F 4301£9		YES 40/C NO	4
FAILURE HODE-FAIL DURIN MFIRMED BY AMALYSIS. A C D FOR AMALYSIS. ONLY THE	FAILUKE MODE-FAIL DURING CHERATION. THE SHED MODULE REPORTEDLY MOULD NOT CALIBRATE, THE REPORTED FAILURE MAS NOT CO FIRNCO BY ANALYSIS. A COMPLETE FAILURE ANALYBIS COULD NOT BE PERFORMED SECAUSE THE COMPLETE CIRCUIT MAS NOT RECEIVE FOR ANALYSIS. ONLY THE MODULE.	MORTEDLY WOULD NOT CALT NOT BE: PERFORMED BECAUS	BRATE. THE E THE COMPL	REPORTED ETE CIRCI	FAILURE WAS NOT CO	
CORRECTIVE ACTION-MOME.	FAILURE HOT CONTINED.					1
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4120-F Filter-Electrical	FAR R7-04848-3	630180	FACTORY	YES ACI	1001
FAILURE MODE-OUT OF TOL	OLERANCE. ATTENUATION TOO GREAT AT PEAK FREGUENCY.	T PEAK FREGUENCY.				
CORNECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME. CAUSE OF FAILURE COULD NOT BE DETERMINED.	OETERHIMEO.				
Amazaria de la compania de la compa						

15 JUN 1966

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBURNE

FA H6-99-04 6YRO-018
FAILURE MOSE-FAILED DURING OFERATION, DURING 1831 OF AUTOFICUS WIND FALLAR. LIGHT FAILED TO GIVE A 60-INDICATION, FAILURE NOT CONFIRMED IN SMRD, DIRTY BLIP RING IN TEST EQUIPMENT TOOLING CAUB ED FAILURE, ROLL GYRO EMED OUTPUT ALSO LOW DUE TO PARTIALLY DEMACHETIZED MAGNET BUT NOT LOW ENOUGH TO GIVE A NO-60. CORRECTIVE ACTION-TEST EQUIPMENT TOOLING SLIP RING WAS REPAIRED AND VALIDATED. 60/C NOTIFIED ALL FACTORY AND SITE P ERSONNEL OF DANAGE THAT CAN BE INTRODUCED IN THE SHAD CIRCUIT BY INADVERTENT VOLTAGE APPLICATION.
TOPILOT-SQUARE-A/B A-99-04-4060F RO PACKACE HEATER/RESISTOR T-410515-967 NO FAILURE MODE-OUT OF TOLERANCE. 6YRO FINE HEATER VOLTAGE MAS TOO HIGH. RESISTOR INSTALLED INCORRECTLY.
CORRECTIVE ACTION-RAR A-99-04-3656 WAS WRITTEN TO CLARIFY ANGIGUOUS INSTRUCTIONS. ECNIT7942 WAS ISSUED TO REDUCE THE E ANGIGUOUS INSTRUCTIONS. ECNISTER WAS ALSO MODIFIED. D. UTOPILOT-SQUARE-A/B A-98-04-4504-F FAR 154F ETR NO 27-41002-895 630124 NO
FAILURE WODE-OUT OF TOLERANCE, 2-VOLT PITCH PROGRAM SLAVING VALUE WAS OUT OF TOLERANCE, FAILURE NOT CONFIRMED IN EXTENSIVE TESTING, DISCREPANCY FOUND DUE TO LACK OF EXACT COMPATIBLITY BETWEEN TEST SETS AT FACTORY AND ETR. CORRECTIVE ACTION-INVESTIGATION INITIATED BY 60/C TO DETERMINE CRITICAL SLAVING TOLERANCES. ECP 7384 SUBMITTED TO A F TO REVISE VALIDATION AND CALIBRATION PROCEDURES HEEDED TO STANDARDIZE TORQUING REFERENCE VOLTAGES, STABILIZE, SLAVI BY TABLE INDEPENDENTLY OF THE GAIN OF EACH GYRO PACKAGE AND MODIFY THE 115 VAC, 400 CPS POWER SUPPLY TO PROVIDE HORE STABILITY.
UTOPILOT-SQUARE-A/B SP-JA-04-4222F FAR GSGLE4 FACTORY YES CRESCENT YRO PACKAGE TRANSDUCER WIS SS-GAGGT-1 HO PACKAGE TRANSDUCER WIS OPEN AT ALL PINS. BROKEN WIRES WERE YOUND IN CONNECTOR. DAMAGE WAS CAUSED BY THISTING OF CONNECTOR CURING ASSEMBLY OF TRANSDUCER THIS COMPONENT HAD BEEN USED FOR VIBRATION TESTS AND HAD BEEN REPAIRED BEEN BEEN USED FOR VIBRATION TESTS AND HAD

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

BUB-BYBTEM	TEST/REPORT NUMBER FAILED COMPORENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	3116	PRI VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-NO CORRECTIVE ACTION TAKEN	RECTIVE ACTION TAKEN.		4			293172
AUTOFILOT-SQUARE-A/B 67RO PACKAGE	A-99-04-4141-F	FAR R7-48186-8	630122	FACTORY	40 764	******
FAILURE MODE-OUT OF SPECI CUTPUT, AMALYSIS COULD FI	OF SPECIFICATION. THE SPIN-MOTOR ROTATION-DETECTOR SUBASSEMBLY 2 REPORTEDLY FAILED BECAUSE OF MIGH COCALD FIND NO CAUSE FOR THE FAILURE INDICATION AND THE BURASSEMBLY REMAINED WITHIN SPECIFICATIONS.	DETECTOR BUBABSEMBL TION AND THE BUBABS	Y & REPORTE EMBLY REMAI	EDLY FAILL	SUBASSEMBLY 2 REPORTEDLY FAILED BECAUSE OF HIGH THE BURASSEMBLY REMAINED WITHIN SPECIFICATIONS.	
CORRECTIVE ACTION-MOME. A AUTOPILOT-SQUARE-A/B	THE CAUSE OF FAILURE COULD NOT BE FOMD. 3P-99-01-415E-F	DAND.	530122	FACTORY	YES HOMEYMELL	9246
GTRO PACKAGE	67RO-RATE	33-04120-1			NO JRSIZSAS	,
FAILURE MODE-FAIL TO OPER CALIBRATED. AMALYSIS FOUM GYROSCOPE MAS REJECTED MON TIOM-MOME. NO FAILURE COLL	TO OPERATE AT PRESCRIBED THES. THE RATE WYROSCOPE WAS REJECTED WHEN THE TORGUE MOTOR COMED NOT BE ALS FOUND ALL PARAMETER VALUES WELL WITHIN SPECIFICATIONS. NO INTERHITTEMCY WAS CASEAVED WHEN THE CTED MOR DURING AMALYSIS TESTS. PAILURE MAY HAVE BEEN A YAULT IN TRY? ARGCEDURE., RFM CORRECTIVE ACURE COALD BE FOUND.	RATE WYROGCOPE WAS REJECTED WHEN THE TORQUE MOTOR COMED MOT BE WITHIN SPECIFICATIONS. NO INTERHITTEMCY WAS CASEAVED WHEN THE CARECTIVE ACURE MAY HAVE BEEN A "AULT IN TRIT MOCEDURE., RFM CORRECTIVE AC	INTERNITE IN TEST A	TORGUE)	HOTOR COULD NOT BE DISEAVED WHEN THE KFH CORRECTIVE AC	
CORRECTIVE ACTION-NOME. N	NO FAILURE COULD BE FOUND.			,		
AUTOPILUT-SAUARE-A/B	AX83-003-193D/FC-CO-01-0013-007	COMPOST TE-FACTORY	1930 630120		22	80268
F.ILURE MODE-FAIL DURING GRANATI AND AT 45.4 SECONDS (48 SPF435ED.	DURING OFFMATION-DUE TO DEFECTIVE AUTOFILOT TEST PROGRAMMEN TAPES, THE EXPECTED YAM STEERING COMM. INS STRASSED.	JI TEST PROGRAMMEN	TAPES, THE	EXPECTED	TAM STEERING COM	
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS. VEHICLE EFFECT-COMPOSITE RE-SCHEDULED.	sybtem exfect-improper analog bignals. Vehicle effect-composité re-scheduled. Composite retest was required.	ACQUIRED.				
CORRECTIVE ACTION-THE AUT	AUTOPILOT TEST PROGRAMMEN TAPES MERE REPLACED.	EPLACED.				
AUTOFILOT-BOUARE-A/B	HG-99-04-4121-P 67RO-RATE	FAR 87-41708-809	4 021089	FACTORY Y	7E3 10	
PAILUPE MODE-OUT OF TOLER FAILUPE MAIS CAUSED BY A PA	PAILUME "CDE-OUT OF TOLERANCE. LOW OUTFUT FROM THE YAM-RATE GYRO BMRD CIRCUIT IN THE REVOTE THREE-RATE GYRO GROUP. Ailume has caused by a partially demagnitized shad mashet.	SYRO SHRD CIRCUIT	IN THE REINO	TE TERES.	RATE STRO SROUP.	
CORRECTIVE ACTION-UNKNOWN	-UMENOMI. INVESTIGATION INITIATED TO DETERMINE THE SOURCE OF VOLTAGE WHICH MAY DEMAGNETIZE THE SMR	INE THE BOURCE OF	FOLTANE WHI	CH HAY OR	MASHETIZE THE SHR	
The statement and the second s	A STATE OF THE PARTY OF THE PAR		-		FAGE 0370	

18 200 1004	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIREGRIME	PILOT SYSTEM-AIREOF	IME.		
BYSTEM BLB-BYBTEM	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE PRI VI	VENDOR NAME	
O MACHET.					43254
AUTOPILOT-BOURE-A/B	H6-89-04-4048F COMMETON ELECT	FAR	130D FACTORY YES		004500
FAILURE MODE-SHORT (ELEC MALS. AM INTERNITIENT SP	FAILUME MOCE-SHORT (ELECTRICAL). GYRO CAN MAS REJECTED BECAUSE YAW DIAPLACEMENT GYRO DID NOT RESPOND TO LONGUING SI GMALS. AN INTERMITTENT SHORT WAS FOUND BETWEEN CONNECTOR PINS JI-K AND JIF.	USE YAW DIAPLACEMEN IS JS-K AND JSF.	IT GYRO DID NOT RESPOND TO	TORBUINE BI	
CORRECTIVE ACTION-ALL PE ED. ALL NEW TRAYS WILL B	CORRECTIVE ACTION-ALL PERSCAMEL CONCERNED RECEIVED SPECIAL TRAINING, ALL MARMESS TRAYS NOT YET FOAMED WERE REINSPEC Ted. All hem trays will be 100 percent inspected effective 1 Jan 1963.	TRAINING, ALL HARME JAN 1963.	SE TRAYS NOT YET FORMED WE	CRE REINSPEC	
AUTOFILOT-SQUANE-A/B	A-AS-04-4035F HEATER RESISTOR	FAR 7-41013-867	177D FACTORY YES		• 7 • 7 •
FAILURE MODE-FAIL DURING MAS FOUND DAMMED.	DURING CPERATICIS. GYRO FINE HEATER NOALD NOT TURN OFF. RESISTOR IN THE TEMPERATURE SENSE CIRCUIT	NOT TURN OFF. REBIE	STOR IN THE TEMPERATURE BEN	AR CIRCUIT	
RECTIVE ACTION-NONE-F	CORRECTIVE ACTION-MONE-PESISTOR NO LONGER PROCURED.				
AUTOFILOT - SQUARE - A/B	A-99-04-4161-F GTRO-DISPLACENT-AMPLIFIER	FAR 7-41907-805	135F FACTORY YES		001639
FAILURE MODE-FAIL TO OPE	O OFERATE AT PRESCRIBED TIME. THE ROLL GYROSCOPE SIGNAL ANPLIFIER HAD NO OUTPUT.	VROBECPE SIGNAL AND	LIFIER HAD NO OUTPUT.		
CORRECTIVE ACTION-NOME.	FAILURE NOT COMPTRMED.				
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-8H-04-4249F Displacement 6tro generator	FAR E7-41002-855	630116 SAFB YES 60/C	Ų	1623
FAILUNE MODE-ELECTRICAL Y BHORTED RETERENCE WINDI NE THIRD SYNC SPEED, THIS	ICAL SHORT, MAIN GYRO CAN MAS REJECTED FOR HIGH PITCH TORGUING MINDING IM TORGUE GEMERATOR-DURING AMALYSIS, ROLL DISPLACEMENT THIS WAS ATRIBUTED TO A DRY SPIN HOTOR BEARING.	or High Pitch Torgi Fis, Roll Displace: I Bearing.	JING GAIN. FAILURE WAS DUE TO PARTIALL. MENT GTRO WAS FOUND TO BE RUNNING AT O	TO PARTIALL RUMNING AT O	
CORRECTIVE ACTION-SPIN MOTOR BEARI EN ON THE TORGUE GEMERATOR FAILURE.	PIN HOTOR BEARING PAILURES LERE STUDIED IN THE SPIN-NOTOR RELIABILITY PROGRAM. NO ACTION WAS TAK MERITOR FAILURE.	IN THE BPIN-MOTOR R	IELIABILITY PROGRAM. NO ACT	7104 MAS TAR	
				PAGE 0371	
فواستهادتها والمارد والمتارية وحدرها والمتاريخ والمتاريخ	en jugas genelikritisti kapten kaluna saan kalunda un kalungan den kapten en ja papa an de papa an defende saa	AND THE PERSON OF THE PERSON O	energy of the control		_

GENE. DYHANICS CONVAIR DIVISION

The state of the s	Q	*****					·	***************************************	7			4 =	
	SITE PRI VENDOR MAME	5/Q s	E MORMAL WHERE ECTIVE ACTION . NEW MARMESS	ON MERCURY MI	YES REARFOTT	VING. ANALYBES CHID THAT THE REES PER HOUR	FROM PLOW OR		TAN WAS DESTO		5/0		
	# 0 # H	7EB 40/C	ABOVI CORRI BILES	WPUT .	£ 6	7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	E HA	ž Q	0	,	7E3 60/C	5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	
	317E 71ME 01F	FACTORY	PERCENT TAGE. TWD RCURY MISS	D VOLT II	FACTORY	LINEAR IN	ALDOMI, AN	FACTORY	£4783.		FACTORY	MASERVED THE	
¥	VEHICLE DATE DIF	1300	ES MERE 20 INPUT VOL. PUT ON MES UES IMPRO	D USING R.	746	TO BE HOW- ON. HONEVE HIMM ALLO	ARNUP, COC	630113	T TORBUING	,	1930 630111	TOTOE CH	
WILOT SYSTEM-AIRSOR	DIF DATA BOURCE PART NUMBER	FAR 27-41002-007	ROLL TORBUING VALY BUTED TO INCORRECT ID USING B.O WOLT IN	TEST TO BE PERFORME. ANISTERS (DESIGN AND	FAR 7-04250-3	TEST SET HALFUNCTION THE MAKE	ITS SPECIFYING THE W PLEXLEADS IN AN EFF	FAR	W PITCH DISPLACEMEN	:	FAR R7-44534-3	TATION-BETECTON CIRC 818. CATHOOE LEAD ON ON RESULTING IN AN I	
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER FAILED COMPONENT NAME	HG-A8-04-4079-F AMPLIFIER-WIRING	PAILURE HODE-ELECTRICAL OPEN, -DURING FINAL CHECKOUT VERNIER ROLL TORQUING VALVES HERE 26 PERCENT ABOVE MARMAL MHERE RS FERCENT IS ALLOMABLE. FAILURE NOT CORRECTIVE ACTIOM-FROCEDURE REVISED FOR CPEN-LOOP TORQUING TEST TO BE PEPFORMED USING 2.0 VOLT INPUT ON MERCURY MISSILES. MEW MARMESS TRAYS DESIGNED AND INSTALLED IN MERCURY CANISTERSIDESIÓN AND INSPECTION TECHNIQUES IMPROVED).	CORNECTIVE ACTION-PROCEDURE REVISED FOR OPEN-LOOP TORQUING TEST TO BE PERFORMED USING 2.0 YOLT IMPUT ON MERCURY MIS LILES, NEW HARMESS TRAYS DESIGNED AND INSTALLED IN MERCURY CANISTERS (DESIGN AND INSPECTION TECHNIQUES IMPROVED).	A-99-04-4130-F GYRO DISPLACENENT	FAILURE WOSE-DRIFT, THE DISPLACEMENT GYRO REPURIEDLY FAILED WHEN IT WAS FOUND TO BE HOW-LINEAR IN SLAVING. ANALYSIS COULD NOT COMPIRE THE REPORTED FAILURE AND THAT THE FIXED FOR THE STRAIN PRINCIPLY OF THE GYRO TO RE 4.8 DEGREES PER HOUR INSTEAD OF THE MAXIMUM ALLOMBLE OF 3 DEGREES PER HOUR. THIS FAILURE WAS ATTRIBUTED TO DISTORTED PLEMEADS.	CORRECTIVE ACTION-GO/C INCORPORATED NEW HANDLING REQUIREMENTS SPECIFYING THE WARNUP, COOLDOWN, AND HANDLING PROCEDU RES. THE VENCOR INCORPORATED BAFFLES INTO THE GYRO MEAR THE PLEXLEADS IN AN EFFORT TO PRECLUDE FAILURE FROM PLOM OR FLOATATION MATERIAL.	NZ-99-04-4039C 67RO	toleramee. Gyro cam mae pejected for low pitch displacement torguing gains, gyro cam was design Ssile and had nigher gaim.		MZ-A9-04-4118-F BHRD-WIRING	(ELECI) AT PRESCRIBED TIME, BFIN-MOTOR ROIATION-DETECTOR CIRCUIT YAS OBSERVED TO HAVE NO CUIPUT A RAWP MITHOUT FOD COOLING DURING SYSTEM TEATS. CATHODE LEAD OF DIGGE CR-4 OF THE SHAD FREQUENCY DIAS FOUND MOT WELDED TO THE RIBBOM CONNECTOR RESULTING IN AN INOPERATIVE PLIF-FLOP CIRCUIT.	
***************************************	ATTEN ANG-WATER	AUTOFILOT-SQUARE-A/B	PAILURE HODE-ELECTRICAL OF ES PERCENT IS ALLOMABLE. FROCEDURE REVISED FOR GMEN-TRAYS DESIGNED AND INSTALLI	CORRECTIVE ACTION-PROCEDUR	AUTOFILOT - SQUARE - A/B GTRO PACKASE	FAILURE WOE-DRIFT, THE DI COULD NOT COW'IRM THE REPY FIXED RESTRAINT DRIFT OF THIS THIS FAILURE WAS ATTRIBUTE	CCRRECTIVE ACTION-GO/C IM RES. THE VENDOR INCORPORATE FLOATATION MATERIAL.	AUTOFILOT-SQUARE-A/B	FALLURE MODE-OUT OF TOLERANCE. GYRO CAM MME RE ED FOR PREVIOUS NZ MISSILE AND HAD NIGHER GAIM.	CORRECTIVE ACTION-UNKNOWN.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OPEN (ELECT) PTER AM EXTERDED MARMAP MÍT VIDER BUÐABBENÐLY MAB FOUND	

	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	. YE			,
STRIKE SUB-STRIKE	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE	VEHICLE DATE DIF TH	817E PRI 71ME DIF OTH	VENDOR NAME VENDOR PART NO	
CORRECTIVE ACTION-EMMASIZED EXISTING POT CONTROL MELDERS CERTIFICATION PROGRAM.	EMPIABIZED EXISTING PROGRAMS FOR VELD SCHEDULES TO INSURE ADEQUATE HEAT AND HOLDTINE AND	SCHEDULES TO INSURE AL	EQUATE HEAT	NO HOLDTI	ME AND A QUALIF	685732
AUTOFILOT-SQUARE-A/B	A-8N-04-4063-F RATE 6YRO	FAR - RT-04574-3	630109 BAFB	4 A	HINNEAPOLIS-HO NEVNELL	••••
FAILURE MODE-STRUCTURAL WE AM OUTPUT WITH MA INF EVER BARS IN THE RATE 67	FAILURE MODE-STRUCTURAL, THE TWO RATE GYRO PAKAGE OUTPUT MULL WOLTAGE WAS HIGH. THIS CAUSED THE TORGUING GAIN TO HA WE AM OUTPUT MITH NO INFUT, AND HIGHER THAM HORMAL MITH AN INPUT APPLIED. THE FAILURE WAS DUL TO ECCENTRIC GUADRI- L EVER BARS IN THE RATE GYROB. ECCENTRICITY WAS PROBABLY DUE TO DROPPING OF GYRO CANISTER. CONTAMINATION WAS ALSO FOUND.	OUTPUT NULL VOLTAGE WAS HIGH. THIS CAUSED THE TORBUING GAIN TO HAITH AN INPUT APPLIED. THE FAILURE WAS DUL. TO ECCENTRIC GUADRI-LILY DUE TO DROPPING OF GYRO CANISTER. CONTAMINATION WAS ALSO FOUND	I, THIS CAUSE ALLURE MAS DI AMISTER, COMI	, THE TORGI E. TO ECCE AMINATION	JING GAIN TO HA ITRIC GUADRI- L WAS ALSO FOUND	
CORRECTIVE ACTION-NOME.						
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	HE-AS-DS-NOSEF DISPLACEMENT GYRO TRANSFORMER	FAR 27-41002-887	1300 FAC 630109	FACTORY NO		395193
FAILURE MODE-SMORT (ELE CASE AND SMORT BETWEEN ROUND POMER SUPPLY, ALL	FAILURE HODE-SHORT (ELECTRICAL), GYRO CAN WAS REJECTED FO CASE AND SHORT, ALL SFIN W COMD POWER SUPPLY, ALL GYROS FURCTIONED MORMALLY AFTER SE	FOR SHED NO-GO INDICATION, SPINHOTOR TRANSFORMER HAD CRACKED MOTOUS FAILED TO RUN. FAILURF HAS ATTRIBUTED TO FAILURE OF GRINHOTOR TRANSFORMER NAS REPLACED.	CN. SPINMOTOR	TRANSFORM	ER HAD CRACKED O FAILURE OF 6	
CORRECTIVE ACTION-UNDER	CORRECTIVE ACTION-UNCEN-YOLDS BENECOS MERE PLACED AT TESSILE LILETINIC FORM INFOTOS	SASIL LIECTRIC PORCH	Marcio.			
AUTOFILOT-SQUARE-A/B	A-99-04-4180-F CIRCUIT BOARD-REBISTOR	FAR 27-15910-1	2010 FAC 630109	FACTORY NO		186548
FAILURE MODE-FAIL DURING NG TESTED IN THE TWO-RATE L CONTING DISCOLORATION: 1	FAILURE MODE-FAIL DURING OPERATION, THE EMITTER- FOLLOWER CIRCUIT BOARD RESISTOR R-3 REPORTEDLY BURNED UP WHILE BEI ME TESTED IN THE TWO-RATE GYRO PACKAGE, AMALYBIS DETERMINED THAT R-3 WAS NOT CAMAGED BUT APPEAREE SO NUE TO CONFORMA L CONTING DISCOLORATION. THE EMITTER-FOLLOMER FAILED DUE TO ABSENCE OF CALIBRATION RESISTORS R-6 AND R-9.	R CIRCUIT BOARD RESISY ED THAT R-5 WAS NOT EA TO ABSENCE OF CALIBRAI	OR R-S REPORT MACED BUT APP ICM RESISTORS	EARES SO S	D UP WHILE BEI	
CORRECTIVE ACTION-NOME.						
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-4091-F 67RO-D18PLACEMENT	FAR 7-04050-8	2010 FAC	PACTORY YES	KEARFOTT CTORSO6005	
FAILURE MODE-ERRATIC OFF	C OPERATION-GYRO OUTPUT BIGMAL WAB 180 DECREES OUT OF PHASE HITH RESPECT TO TORQUING SIGMAL. FAI O WIRING ERROR BY VENDOR IN BIGMAL GENERATOR MOUSING. HUMAN FRROR.	18D DEGREES OUT OF PHASE GENERATOR HOUSING, HUMAN	PHASE WITH RESPECT HUMAN ERROR.	To TORQUE	H6 SIGNAL. PAI	
CORRECTIVE ACTION-VENDOS	CORRECTIVE ACTION-VENDOR CHANGED WIRING DIAGRAN OF BYRO TO ALLOM INTERCHANGING OF SIGNAL LEADS INTERNALL! TO ASSURE	io allow interchameine	OF STEMAL LE	ADS INTERN	ALL 7 TO ASSUME	
					PASE 0373	,

COMMECT PARATHM AND WILL PROHIBIT ANY EXTERNAL INTERCANNING OF ANY LEADS. ANY COLOR CONTAMINATION THE NATE ONTO WAS REJECTED IN THE ELECTRONICS MANAPACTURING ARCA WHEN AN INTERNAL PARTS OF THE GIND MAN WOODLING AT THE CARE SEAM, INCHECT THE INTERNAL PARTS OF THE GIND. COMMECTIVE ACTION-VENDOR CAMMED DESIGN TO INCOMPARE HEALTH PELIBORCY. ANY CONTINUE HOLD CONTAINING THE NATE OF THE WAY PERFORM. COMMECTIVE ACTION-VENDOR CAMMED DESIGN TO INCOMPARE HEALTH PELIBORCY. ANY CONTENT OF THE WAY FAILURE. COMMECTIVE ACTION-VENDOR CAMMED PERFORMATE HEALTH PELIBORCY. ANY OF A SPONGAL HEALTH PERFORMATE THE TALK THE NATION OF THE WILL ANY OF THE WOOD PLACTACE. ANY OF A SPONGAL HEALTH CONTAINING THE NATION OF THE WILLIAM PELIBORCY. ANY OF THE WOOD OWN HEALTH PELIBORCH THE WAY TALKET THE NATION OF THE WILLIAM. COMMECTIVE ACTION-WOR AGAINED. ANY OF THE WAY TALKET. COMMECTIVE ACTION-WOR AGAINED. ANY OF THE WOOD THE WOOD PLUCKER WAS THE WOOD THE WAY OF THE WOOD TH	FAN 35-04120-1 35-04120-1 HE ELECTRONICS HANUF OPED. A SHALL BALL C OPED. A SHALL BALL C THE CASE SEAM, INC FAR 27-41002-909 EFEBBACK.	ACTURING AREA WHI "F TIN, LEAD AND OF TROL TECHNIQUES REASED FLUGHING 1370 WTR 6301-34 D 70 VOC. FAILURE IN CRITICAL POST	ME COMPEN TO ELLY	YES HONEYMELL NO JESIESSI AN INTERNAL INTER PPER CONTANIMATION ELIMINATE CONTANI ME, AND MICROSCOFI YES KEARFOTT NO CONTIRNED DUE TO A	
CCTIVE ACTION-VENDOR CHANGED DESIGN TO INCOME MATER VOLTAGE WAS PRESCRED IN THE MODE WAS PRESCRED IN THE SHORT-COME BETWEEN THE PRINCE OF PRASE-S DEVELORMS BETWEEN THE PRASE-C TLEK-LEAD AND NOTOR MODEING. AS CHANGES IN MAINFACTURE. CHANGES INCLUDE THE ELISHIMATION OF THE ENDELING AS CHANGES IN MAINFACTURE. CHANGES INCLUDE THE ELISHIMATION OF THE ENDELONG THE GIRO. CT -SAUARE-A/B SP-ND-CA-4090F GENCH CANDEN TO THE HEATER WOLTAGE COCTOR CONTAMINATION-YAW GYRO FINE HEATER WOLTAGE COCTOR CONTAMINATION-YAW GYRO FINE HEATER WOLTAGE WAS POUND FLUCKAGE. CT INC ACTION-WENDOR CHANGED DESIGN TO INCOMPORATE NETAL CHANGE WAS POUND FLUCKAGE. MATE MODE-ERRATIC OFFRATION. REMOTE RATE GYRO PACKAGE WAS MATEN YAW DISPLACEMENT GYRO HEATER WOLTAGE WAS POUND FLUGEN YAW DISPLACEMENT GYRO HEATER WOLTAGE WAS FAILURE.	SS-DAIRD-1 SS-DAIRD-1 HE ELECTRONICS MANUF OPED, A SMALL BALL C THE CASE SEAM, SMC. T THE CASE SEAM, SMC. FAR R7-A100E-909 EF-BA100E-909 EF-BA100E-909 EF-BA100E-909 EF-BA100E-909	430104 FACTOR ACTURING AREA 1 ITIN, LEAD AN ISTO WIR 430104 D 70 VDC. FAILL IN CRITICAL FOR	HEN AN I	HASIZSAS INTERNAL INTER CONTANINATION MINATE CONTANI AND MICROSCOPS REARFOTT	
WE WODE-CONTANTHALTION. THE RATE GYRO WAS REJECTED IN THE SHORT-CIRCUIT OF SPIN MOTOR PHASE—E TO PHASE—B DEVELOR OF SHORT-CIRCUIT OF SPIN MOTOR PHASE—E TO PHASE—B DEVELOR OF SHORT PROBLEMS AS THE GYRO. ECTIVE ACTION-VENDOR THE ELMINATION OF SOLDER PUDDLING A SHARTSON OF THE SHIPTER VOLTAGE COCTORAGE INCLUDE THE ELMINATION OF THE SHIPTER VOLTAGE COCTORAGE AND SP-00-04-4090P FOR HEATER VOLTAGE COCTORAGE MOTOR CANDON CHANGED DESIGN TO SPICOPONATE METALICATIVE ACTION-VENDOR CHANGED DESIGN TO SPICOPONATE METALICATIVE ACTION-VENDOR CHANGED PERSON TO SPICOPONATE WAS POUND PLANCE. OT -SQUARE—A/B SP-90-04-4099—F RATE GYRO PACKAGE WAS FOUND PLANCEN YAW DISPLACEMENT GYRO HEATER VOLTAGE WAS POUND PLANCEN YAW DISPLACEMENT GYRO HEATER VOLTAGE WAS POUND PLANCED ACTION-NOWE MEGUINED.	HE ELECTRONICS HANGE OPED. A SMALL BALL CO. IT THE CASE SEMI, SME FAR E7-41002-909 ST-4104-909 LLIC FILM RESISTORS	ACTURING AREA IN TIN, LEAD ANG TROL TECHNIQUES REASED FLUGHING 850134 B50134 B50134 B50134 IN CRITICAL FOO	TINE, TEST	INTERNAL INTER CONTANINATION HIMATE CONTANI AND MICROSCOPI KEARFOTT IRNEED BUE TO A	· •
CORRECTIVE ACTION-VERGY MADE SHEEPING CHARES IN MINUFACTURING AND BULLITY-CONTROL TECHNISHES TO ELIMINATE CONTAIN MATION. CHARMES INCLUDE THE ELIMINATION OF PLUE STRONG PACAGE IN MINUSCOLUS AT THE CASE SEAM, INCREASED PLUSHING TINE, AND MICROSCOSI C EXAMINATION OF THE HIRRALL PARTS OF THE GIRG. UNDTILCT-SOURCE AND SHEEPING THE WEATER VOLTAGE CACILLATED BETWEEN O AND TO VOC. FAILURE CONFIRMED DUE TO A SCINCE THO PACAGE WHO PACAGE CORRECTIVE ACTION-VERDOR CHARKED DESIGN TO INCOPPORATE METALLIC FILM RESISTORS IN CRITICAL POSITIONS IN THE CINCUIT CORRECTIVE ACTION-VERDOR CHARKED DESIGN TO INCOPPORATE METALLIC FILM RESISTORS IN CRITICAL POSITIONS IN THE CINCUIT THO PACAGE CORRECTIVE ACTION-VERDOR CHARKED DESIGN TO INCOPPORATE WE RELECTED AS PART OF MATCHED RET MITH AUTOPILOT GYAO PACAGE WAS POUND PLUCTUATING. PAILURE NOT IN RENOTE RATE GYAO PACAGE WAS POUND PLUCTUATING. PAILURE NOT IN RENOTE RATE GYAO PACAGE. SEE CORRECTIVE ACTION-NOWE RESUIRED.	RING AND GUALITY-CON IT THE CASE SEAM, INC FAR E7-4100E-909 EEEBACK, EEEBACK, LLIC FILM RESISTORS	REASED FLUSHIM 1570 MR 6301-M D 70 VOC. FAILU	TO ELLY TIME: 1	AND MICROSCOPE AND MICROSCOPE KEARFOTT FRICE DUE TO A	
TOR YOLTAGE O IN INGARE PACKAGE NE POUND	FAR 27-41002-909 ILLATED BETWEEN O AN YEDBACK.	1970 MR 630134 D 70 VOC. FAILT IN CRITICAL FOO	75 50 50 50 50 50 50 50 50 50 50 50 50 50	KEARFOTT FRICO DUE TO A	6 6 6
RE MODE-CONTAMINATION-YAW GYRO FINE HEATER VOLTAGE CACO OF DEFOAITED CANDON RESISTORS R-6 AND R-14 IN MAGAINF PROTICE ACTION-VENDOR CHANGED DESIGN TO INCOMPORTE METALOT-SAURE-A/B SP-90-04-4098-F RATE GYRO PACKAGE WILLIAMS HODE RATE GYRO PACKAGE WILLAMS VOLTAGE WAS POUND PLY-80-04-4080-F FOR PRIMARY FAILURE.	TELDBACK. EEDBACK. LLIC FILM MESIBTORB	D 70 VOC. FAILL	F CO	IRMED BUE TO A	
SP-90-G4-4098-F RATE SYRO LACEMENT GYRO PACKAGE LACEMENT GYRO HOUND FOR PRIMART FAILURE. WONE HEBUIRED.			111045	IN THE CIRCUIT	
C OPERATION, REMOTE RATE GYRO PACKAGE ACEMENT GYRO HEATER WOLTAGE WAS POUND FOR PRIMARY FAILURE. OME HEAVIRED.	FAR 87-41703-409	1370 MR 630104	88	HOKEYMELL	993077
	WAS REJECTED AS PART OF MATCHED PET WITH AUTOPILOT GYRO PA PLUCTUATING. FAILURE NOT IN RENOTE RATE GYRO PACKAGE. SEE	F MATCHED PET N	TH AUTO	PELLOT GYRO PA PACKAGE, BEE	
AUTOPILOT-SQUARE-A/B A-89-04-4137F B-RO PACASÉE BESD/TRANSISTOR	FAN 27-41002-935	TOE FACTORY 630102	2 2		
FAILURE MODE-FAIL DURING OPERATION. THE GYMO PACKAGE FAILED IN THE MISSILE FINAL CHECKOUT DOCK WHEN THE SPIN-WOTOR Gotation-detector output was low. Transistor as of subissembly 2. Of channel 8 had mish emitter-to-collector leakage Alsoliths in malfunction of the plip-plop eircuit.	IN THE MESSILE FINALLY SON CHANNEL B HA	FINAL CHECKOUT DOCK WHEN THE BPIN-WOTOR B HAD HIM ENITTER-TO-COLLECTOR LEAKAGE	10-COLL	HE SPIN-MOTOR	

CONVAIN DIVISION

DIFFICULTIES REVIEW-AUTOFILO! SYSTEM-AIRBORNE

	SYSTEM SUG-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT HAME	HBER DIF DATA BOURCE HAME PART NUMBER	VEHICLE SITE	PRI VENDOR NAME OTH VENDOR PART NO	
	CORRECTIVE ACTION-NOME, EXACT CAUSE IRCUITAT DURING DEPOTTING OPERATION,	8	TRANSISTOR FAILURE COALD NOT BE DETERMINED BECAUSE OF	HINED BECAUSE OF DAM	DAMAGE TO ABSOCIATED C	•
	AUTOFILOT-BAUARE-A/B	NZ-95-54-4015F AMPLIFIER-RESISTOR	FAR 67-44584-8	1760 MTR	YES MACHETIC CONTR MO OLS CO. TC7C-1	
	FAILURE MODE-ERRATIC O	IC OPERATION-ROLL FINE HEATER ETIC AMPLIFIER CHANGED VALUE I	FAILURE MODE-ERRATIC OPERATION-ROLL FINE HEATER VOLTAGE OBCILLATED BETHEEN O AND 110 VOLTS. FAILURE ANALYSIS REVEAL Ed resistor in naugetic amplifier changed value from 215k to 145k and caused a Dioce to short.	AND 110 VOLTS. FAILL A DIOCE TO SHORT.	RE AMLYSIS REVEAL	
	CORRECTIVE ACTION-THE	RESISTOR WAS CHANGED FROM	CORRECTIVE ACTION-THE RESISTOR WAS CHARED FROM CARBON TO METAL FILM. THE DIODE WAS REPLACED WITH ONE OF HIGHER INV EASE VOLTAGE RATING, REF MACHETIC CONTROLS ENGINEERING CHANGE REQUEST 1808.	ODE WAS REPLACED WITH	OME OF HIGHER INV	
	AUTOFILOT-SAUARE-A/B	A-99-04-4064-F RATE 6YRO 34RD	FAR 87-04574-3	GE1224 FACTORY	YES HINNEAPOLIS-HO NO NEYNELL JRS101AE	•
	FAILURE MODE-OUT OF TO WOLTAGE, THIS DEMAGNETI	F TOLERANCE, SHRD SIGNAL PROM NETIZING THE SHRD MAGNET,	SHED SIGNAL FROM RATE GYRO BEING TOO LOM CAUSED BY INFROPER AFFLICATION OF EXTERNAL SHED SHEEF.	ED BY IMPROPER APPLIC	ATION OF EXTENSE.	
	CORRECTIVE ACTION-MAKE	SHRD VOLTAGE INSENSITIVE	SHED VOLTAGE INSENSITIVE TO MROWG WOLTAGES BEING APPLIED TO OUTPUT TERMINALS.	LED TO CUTPUT TERMINA	•	
	AUTOFILOT-SQUARE-A/B	A-SH-D4-4037F GTRO-TRAHSFORMER	FAR RT-4100R-835	46F MILLING YES	TES TO	•••
	FAILURE MODE-SHORT, EL NSFORMER, SFIN HOTOR TR NSFORMER CRACKED MAÉ AN	ELECTRICAL-GYRO GAN WAS REJECTED FROM MISS TRAHSFORMER PRIMARY WINDINGS NERE OPEN, SE AMP CANE, CAUSE OF DANAGE WAS NOT LEARNED.	ELECTRICAL-GYRO CAH WAS REJECTED FROH MISSILE 48 F AT BHILLING AFB FOR A SHONT CIRCUIT IN A TRA TRAHSFORMER PRIMARY VINDINGS WERE CPEN, SECCHDARY WINDINGS WENE SHORTED TOGETHER. HEAT FROM TRA AMP CANE. CAUSE OF DANAGE MAS NOT LEARNED.	iilling afb for a smor mas mere smorted toget	T CIRCUIT IN A TRA HER. HEAT FROM TRA	
	CORRECTIVE ACTION-MONE.					
	AUTOFILOT-SQUARE-A/B GYBO PACKAGE	A-A9-04-3591F THERMOSTAT	FAR R7-45045-605	134F FACTORY GRIEIS	YES NO	
	FAILURE MOIE-ELECTRICA PIN Z ON JI WAS SMORTEN E CASE OF THE THERMOSTA	PAILURE MODE-ELECTRICAL BHORT, THE GYRO TEMPCRATURE LIGHT ON THE SEL PIN Z ON JI WAS SHORTED TO GROUND, CAUSED BY A SHORT-CIRCUIT SETWEEN E CASE OF THE THERMOSTAT AS A REBULT OF INCORRECT SOLDER APPLICATION.	FAILURE MONE-ELECTRICAL BHONT. THE STRO TEMPERATURE LIGHT ON THE SELF-CHECK PANEL INDICATED MO-60 AT ALL TIMES AND PIN Z ON JI WAS BHORTEN TO GROUND. CAUSED BY A SHORT-CIRCUIT BETWEEN PIN R OF THERMOSTAT 8-3, P/N R7-D4563-3, AND IN E CASE OF THE THERMOSTAT AS A REBULT OF INCORRECT BOLDER APPLICATION.	PAMEL INDICATED MO-GC THERMOSTAT 8-3, P/N	AT ALL TIPES AND EP-04563-3, AND IN	
1	CORRECTIVE ACTION-PER D IMPRECTION BO PRODUCT	CORRECTIVE ACTION-PER RAR-A-A9-D4-383D, PERSONNEL D inspection so product adality bill be compatible	CORRECTIVE ACTION-PER RAR-A-A9-D4-3830, PERSCHNEL WERE CAUTIONED TO USE GREATER CARE IN ASSEMBLY. MANUFACTURING, AM . Inspecticm do product auality mill be compatible mith applicable hilitary specifications and standard ensineering	ITER CARE IN ABSEMBLY.	MANUFACTURING, AN MOARD ENGINEERING	
					PAGE 0373	

	BYBTEN OLD-BYBTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE OIF	817E	7 ×	VENDOR NAME VENDOR PART NO	
	PRACTICES.	and the second						***
	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	9P-99-04-4169-P	7AR R7-04874-8	612128 0103	FACTORY	# Q	YES HOMETWELL HO JRS101AZ	**
	FAILURE MODE-ELECTRICAL TIALLY SHORTED WINDING.	FAILURE MODE-ELECTRICAL SHORT. THE RATE GYROSCOME SHIN MOTOR RATE DETECTOR OUTPUT LASS VERY LOW DUE TO BURNT AND PAR TIALLY SHORTED WINDING. THE CAUSE OF THE BURNT SHED MINDING COULE NOT BE DETERMINED.	OTOR RATE DETECTOR OUT	TPUT MAS MINED.	707 AE	¥ ¥	BURNT AND PAR	
	CORRECTIVE ACTION-NOME.			,				
	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-4201-F RATE 67RO	7AR 27-[1574-3	42127	FACTORY	ž Q	YES HONEYNELL NO	887708
	FAILURE MODE-LEAK-EXTE	FAILURE MODE-LEAK-EXTERMAL. REPORTED LEAKING OIL CUE TO CAUSES LINKHOMM.	CAUSES LYKNOM.	•				
	CORRECTIVE ACTION-MOME.	CORRECTIVE ACTION-MOME. FAILURE NOT CONFIRMED. OI!, CONTAMINATION OF THE GYROSCOPE WAS ATTRIBUTED TO OTHER SOURCE.	MINATION OF THE GYROSO	COPE WAS AT	TRIBUTED	5	THER SOURCE.	
	AUTOFILOT - SQUARE - A/B GYRO PACKAGE	FAR 38-99-04-4102-F DISPLACEMENT GYRO SHAD WINDINGS	FAR 7-14250-8	621217	FACTORY	£ ₹	YES 40./C HO C702506000	•••
	FAILURE MODE-BHORT-ELECT. MINDINGS MERE SHORTED DUE	FAILLAE MODE-BHORT-ELECT. 3 G1ROS REJECTED FROH JFG AREA FOR SHRD VOLTAGE EITHER JUSUFFICIENT OR NOM EXISTENT, SHRD WINDINGS WERE SHORTED DUE TO INADVERTENT APPLICATION OF HIGH VOLTAGE WHILE GYROS WERE IN NEXT ASSY PACKAGE.	FOR SHED MALTAGE EITH HIGH MOLTAGE WHILE GYI	HER THRUFF	CIENT OR	Z S	EXISTENT, SMO	
	CCRI ECTIVE ACTION-NO CC	CORRECTIVE ACTION STATED ON FAR.						
	AUTOFILOT-SQUARE-A/B	NZ-A9-G4-3591F RATE GYRO THERWOSTAT	FAR #7-45045-803	1860	FACTORY	ž Š		086033
	FAILURE MODE-ELECTRICAL PIN 2 ON JI WAS SHORTED OUND OF PHEP MOSTAT 8-5 (F	SHORT, THE GYAO TEMPERATURE TO GROUND, THE FAILURES W.RE PUN 27-04355-3) IN BOTH THO-P MOLDERING TECHNIQUE DURING 9)	LIGHT ON THE BELF-CHECK FANEL, INDICATED NO-60 AT ALL TINES AND CONFIRMED AND ATRIBUTED TO SHORT CIRCUITS BETWEEN PIN E AND 68 INTE GYRO PACKAGES (8/HS EGS-(1858 AND 211-GEGG), THE SHORT-CIRCUITS PACKAGE ASSENDLY,	NEL INDICA TO SHORT CL	TEP NO-6	0 AT	ALL TIMES AND IN PIN E AND GR HE SMORT-CIRCU	
	CCRRECTIVE ACTION-PER R , MAN WACTURING, AND ING ANDAR: ENGINEERING PRACT	CORRECTIVE ACTION-PER RAR MZ-AS-DS-3830; PERSONN'L MERE CAUTIONED AND RE-INSTRUCTED TO USE GREATER CARE IN ASSEMBLY MAN WACTURING, AND INSPECTION SO PRODUCT SUMLIT' WILL BE COMPATIBLE WITH APPLICABLE MILITARY SPECIFICATIONS AND ST MOSE: ENGINEERING PRACTICES.	CAUTIONED AND AE-ENSTI E COMPATIBLE MITH APPE	UCTED TO U	JSC GREAT	90	RE IN ASSEMBLY	
<u>.</u>	Transmitterstation for a place of the second construction of the second con	and the second compared of the second	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TRANSPORT N	The Control of the Co	The state of the s			, _

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME

			15096		896048					
VEHICLE SITE PRI VENOR MANE DATE DIF THE DIF OFH VENDOR PART NO	621217 FACTORY NO REARFOTT NO C702306000	FAILURE HODE-OUT OF TOLERANCE, GYRO HAD LOM SHAD OUTPUT, FAILURE CONFIRMED DUE TO DEMACHETIZED SHED MACHET-MOST PRO ABLE CAUSE OF DEMACHETIZATION IS HUMAN FRROR BY INADVERTENT APPLICATION OF VOLTAGE. CORRECTIVE ACTION-INVESTIGATION SHOWED THAT DEMACHETIZATION IS CAUSED ONLY BY MISAPPLICATION OF EXTERNAL VOLTAGE-6D CONTINIED SPECIFIC INSTRUCTIONS TO FACTORY AND SITE PERSONNEL WARNING OF DAMAGE TO SHED CIRCUIT BY IMADVERTENT APPLICATION.	ARIEIS FACTORY YES GD/C	OF TOLERANCE-SMRD SIGNAL FROM RATE GYRO TOD LOM CAUSED BY IMPROPER APPLICATION OF 26 VAC CAUSING D SMRD MAGNET. THE ERRONGOUS WOLTAGE WAS THE RESULT OF A HISSILE HARNESS WIRING ERROR.	GELELS FACTORY YES TEXAS INSTRUME NO NIS	CAILURE MODE-CONTANINATION. THE YAW GYRU OUTPUT WAS FOUND TO BE 2.7 VOLTS RATHER THAN THE EXPECTED 4.0 VOLTS DURING FACTORY CHECKOUT. A TAULTY MALLING AMPLIFIER IN THE TEST SET CAUSED AN EXRONEOUS INDICATION OF FAILURE. A DISPLACEN SY GAIN SWITCH FAILURE WAS UNCOVERED DURING THE ANALYSIS. THIS FAILURE WAS CAUSED BY A FAULTY TRANSISTOR GII (2M496 IN THE YAW SIGNAL ANWLIFIER SZP. 398 MHICH WAS FAULTY DUE TO ENCAPSULATED MOISTURE DURING MANUFACTURE.	CORRECTIVE ACTION-THE FAULTY TEST SET HAS BEEN REPAIRED. THE TRANSISTOR VENDOR HAS INSTALLED WELDING ATMOSPHERE MON TOR EQUIPMENT TO ELIMINATE HOISTINE FROM THE TRANSISTOR CASE WHILE BEING SEALED.	1300 FACTORY NO 621213 NO	OF TOLERANCE, THE VERHIER ROLL TORGUING VALVED WERE FROM ES TO 31 PERCENT ABOVE MOMINAL DURING DIS ROLLING TEST, THE SPECIFICATION LIMITS ARE PLUS AND MINUS AS PERCENT, THE FAILURE INDICATION IS ATTRUCE SUILD-UP INVOLVING USING A VOLTAGE LEVIL LOWER THAN THAT USED TO CALIBRATE THE CANISTER AND TO TO THE CANISTER.	CORRECTIVE ACTION-PAILUNE NOT CONFIRMEL: THE RELIABILITY PAILURE ANALYSIB GROUP ARRANGED WITH THE BYSTEMS ENGINEERS
DIF DATA BOUNCE PART NUMBER	F1R 7-04850-8	ALLURE CONFIRMED DU 7 APPLICATION OF WO W 13 CAUSED ONLY BY DANEL WARNING OF DA	FAR E7-04574-3	O LOM CAUSED BY IM	FAR 1 27-44554-5	IO BE 2.7 VOLTS RATI IT CAUSED AN ERRONE HIS FAILURE WAS CA IO ENCAPSULATED MOLI	IE TRANSISTOR VENDO NE MHILE BEING SEAL	FAR 27-4100g-697	LUED WERE FROM ES PLUS AND MINUS ES PL	ILURE ANALYSIS GRO
TEST/RIPORT HUMBER	3F-99-04-409R-F 5YRO-013FL:CENEVI 3MB0	FAILURE HODE-OUT OF TOLERANCE, 6183 HAD LOM SHRD OUTPUT, FAILURE COMFIRED BABLE CAUSE OF DEMACRETIZATION IS HUMAN FRROR BY IMADVERTENT APPLICATION OF CORECTIVE ACTION-INVESTIGATION SHOWED THAT DEMACRETIZATION IS CAUSED OMLY ACCOUNTED SPECIFIC INSTRUCTIONS TO FACTORY AND SITE PERSONNEL WARNING OF	A-99-04-4062F SMRD WIRING	OF TOLERANCE-SMRD SIGNAL FROM RATE GYRO TOO LOM CAUSED BY IMPROPER APPLICATION OF 26 SMRD NAGHET. THE ERRONECUS VOLTAGE WAS THE RESULT OF A HISSILE HARNESS MIRING ERRORNOME.	NZ-A9-D4-3586F DISPLACEMENT GTRO TRANSISTOR EM98 27-44554-5	CAILURE MODE-CONTAMINATION. THE YAW GYRU OUTPUT WAS FOUND TO BE 2.7 VOLTS RATHER THAN THE EXPECTED 4.0 VOLTS FACTORY CHECKOUT. A L'AULTY MALLING AMPLIFIER IN THE TEST BET CAUSED AN EXRONEOUS INDICATION OF FAILURE. A DIS ENT GAIN SWITCH FAILURE NAS UNCOVERED DURING THE ANALYSIS. THIS FAILURE WAS CAUSED BY A FAULTY TRANSISTOR GIS) IN THE YAW SIGNAL AMPLIFIER SZP. 398 MHICH WAS FAULTY DUE TO ENCAPSULATED MOISTURE DURING MANUFACTURE.	HINE FAULTY TEST SET HAS BEEN REPAIRED. THE TRANSISTOR VENDOR H. ELIMINATE MOISTIME FROM THE TRANSISTOR CASE IMPLE BEING SEALED.	HG-99-DA-3387F DISPLACEMENT CYRO	FAILURE MODE-OUT OF TOLERANCE. THE VERHIER ROLL TORQUING VALACEMENT ROLL TORQUING TEST, THE SPECIFICATION LIMITS ARE PROTED TO TOLERANCE BUILD-UP INVOLVING USING A VOLTAGE LEVILL OLERANCES OUTSIDE OF THE CANISTER.	UNE MOT CLUMIANELY, THE RELIABILITY PI
STRICE BUR-BYRTER	AUTOFILOT-NGUARE-A/B	FAILURE HODE-OUT OF TO BABLE CAUSE OF DENAGNETI CORRECTIVE ACTION-INVE	AUTOPILOT-SQUARE-A/B	FAILURE HODE-OUT OF TOLE EAACHETIZATION OF SHED N	AUTOFILOT-SQUARE-AZB GT:10 PACKAGE	CAILURE MODE-CONTAMINA' FACTORY CHECKOUT. A FAI ENT GAIN SWITCH FAILURE) IN THE YAW SIGNAL AND	CORRECTIVE ACTION-THE !	AUTOFILOT-SQUARE-A/8 GYRO PACKAGE	FAILURE MODE-OUT OF TOU PLACEMENT ROLL TORBUING IBUTED TO TOLERANCE BUIL OLERANCES OUTSIDE OF THE	CORRECTIVE ACTION-PAILL

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\$UB3737EM	FAILED COMPONENT MANE	PART NUMBER	DATE DIF TIME	D17 OTH	VEHOOR P	
NG AND ENGINEERING PROCHE LEVEL OF 0.4 VOLT FO	PROCEDURES GROUP TO HAVE THE SYSTEM LEVEL I FOR FLISH COMING, PROCEDURE 27-82885-1-	EVEL TESTS PERFORMED AT THE LEVEL 88-5.	8	2 VOL.78	VOLTS INSTEAD OF AT T	•
AUTOFILOT-SQUARE-A/B	Ax62-0072/FC-CO-01-0013-008	COMPOST TE-PACTORY 27-44534-5	1620 FACTORY GELESE	ORY YES	3/03	*0244
FAILURE MODE-FAIL DURI	DURING OPERATION-ALL YAN GYRO BIAS AND YAW INTEGRATOR FUNCTIONS WERE 35 PC1 LOM.	D YAW INTEGRATOR FUNCT	ONS WERE 35 PC	1 104.		
SYSTEM EFFECT-OPERATION TOO LOM.	H 700 LOM.					
WENICLE EFFECT-COMPOSI	VEHICLE EFFECT-COMPOSITE RESCHEDULED, SYSTEM AND COMPOSITE LEVEL TESTING MERE REQUIRED.	ITE LEVEL TESTING WERE	REQUIRED.			
CORRECTIVE ACTION-THE	GYRO PACKAGE WAS REPLACED.					
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4119-F CIRCUIT BOARD-TRANSIBTOR	FAR 27-41378-805	621E12 FACTORY	ORY YES		995731
FAILURE MODE-FAIL DURI	DURING OPERATION. THERMAL RUMAWAY OF TRANSISTOR OR RESULTED PROM AN INADERUATE MEAT SIMK.	TRANSISTOR GE RESULTED	PROM AN INADER	WATE HEA	T SIM.	
CORRECTIVE ACTION-A DE	DESIGH CHANGE WAS MADE TO THE SIGNAL AND TORQUER AMPLIFIERS.	L AND TORQUER AMPLIFIE		- 1		
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-4149-F GYRO-DISPLACENT	FAR 7-04250-3	E63D FACTORY 621212	ORY YES	KEARFOTT C702306000	
FAILURE MOE-DRIFT. THE DISPLACEMENT G D RESTRAINT DRIFT OF THE GYRO MAS 15.28 E 18 ATTRIBUTED TO DISTURTED FLEXLEADS.	THE DISPLACEMENT GYRO FAILED WHEN IT WAS FOUND TO HAVE EXCESSIVE DRIFT, ANALYSIS FOUND THE FIXE THE CYRO WAS 15.28 DEGREES PER HOUR WHEREAS THE MAXIMUM ALLOWABLE IS 3 DEGREES PER HOUR. FAILUM ISTORTED FLEXLEADS.	T WAS FOUND TO HAVE EXC NHEREAS THE MAXIMUM A	ESSIVE DRIFT.	ANALYSES EGRUES P	FOUND THE FIXE ER HOUR. FAILUR	
CORRECTIVE ACTION-6D/C RES. THE VENDOR INCORPO FLOATATION MATERIAL.	CORRECTIVE ACTION-60/C INCORPORATED NEW HANDLING REQUIRENENTS SPECIFTING THE WARNUP, COOLDOMN, AND MANDLING PROCEDU RES. THE VENDOR INCORPORATED BAFFLES INTO THE GTRO NEAR THE PLEXLEADS IN AN EFFORT TO PRECLUDE FAILURE FROM PLOM OF FLOATATION MATERIAL.	ENENTS SPECIFYING THE I THE PLEKLEADS IN AN EST	WARNUP, COLDON	N, AND H	ANDLING PROCEDU	
AUTOFILOT-SQUARE-A/B	A-99-04-4051-F Filter-Electrical	FAR 87-04848-4	SELEGY FACTORY	ORY YES		
FASLURE NOOE-OUT OF TO	TOLERANCE-THE SMED BANDFABS FILTER WAS OUT OF TOLERANCE AT 1833 CP4.	MAS OUT OF TOLERANCE A	7 1633 CP4.			
CORRECTIVE ACTION-WOME	CORRECTIVE ACTION-NOME-LIMIT DESTROYED ON REMOVAL FROM CIRCUIT BOARD.	INCUIT BOARD.				
Transmission systems and the second statement of the second statement of the second se						
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	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSCRIME	OPILOT SYSTEM-AIRBOR	¥	***************************************		r
# # # # # # # # # # # # # # # # # # #	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	11ME DIF OTH	I VENDOR NAME	
AUTOFILOT - SQUARE-A/B GTRO PACKAGE	A-99-04-4826F 8MC	FAR 27-43187-3	421207	FACTORY YES	5/09 8	******
FAILURE MODE-OFEN ELECT O A DEFECTIVE MELD.	ELECTRICAL, SURD SUBASSEMBLY UMS REJECTED FOR AN OPEN CIRCUIT BETWEEN PINSI AND 6. THIS LAS DUE	D FOR AN OPEN CIRCUI	7 BETIEEN	THEL AND &	. THIS UMS DUE T	
CORRECTIVE ACTION-NOME.						
AUTOPILOT-SQUARE-A/B	A-93-04-4174-F GYRO-DI3PLACEHENT-MIRING	FAR 7-04250-3	621204	PACTORY YES	S KEARFOTT C702504000	88433
FAILURE MODE-DRIFT, THE	. TWO DISPLACEMENT SYRO EXHIBITED HIGH DRIFT. THE FAILURES WERE CAUSED BY FLEXLEAD DISTORTION.	RIFT. THE FAILURES IN	ERE CAUSED	BY FLEXLEA	D DISTORTIOM.	
CORRECTIVE ACTION-MARM IS INSTALLING BAFFLES IN	MARMIE, COOLDOMN, AND HANDLING REQUISEMENTS WERE INCORPORATED INTO APPLICABLE PROCEDURES.	NIS YERE INCORPORATE	D INTO APP	CATATION M	CEDURES. VENDOR ATERIAL.	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	SP-AB-04-3345F GYRO-DISPLACEMENT.	FAR E7-4100E-899	021129	FACTORY YES	YES KEARFOTT NO	904708
FAILURE HODE-ÉLECTRICAL FIRHED (PIN B ON 30541-J NG THE GYRO IMOPERATIVE,	RICAL OPEN. THERE HAS NO CUTPUT FROM THE SPIN-MOTOR ROTATION DETECTOR (SMED). THE FAILURE WAS CON 1541-11). THE FAILURE WAS CAUSED BY A BURNT AND PROKEN FLEXLEAD IN THE ROLL DISPLACEMENT GYRO MAKI (TIVE.	SPIN-MOTOR ROTATION NI AND ERCKEN FLEX.E	DETECTOR AD IN THE I	(SMED). THE ROLL DISPLA	FAILURE WAS CON CEMENT GYRO MAKI	
CORRECTIVE ACTION-GD/C D MARCH 30, 1963, BAFFLE LOATATION MATERIAL.	CORRECTIVE ACTION-GO/C INCORMARTED NEW HANDLING REQUIRENENTS INTO APPLICABLE PROCEDURES. (REF NEWO 356-2-5063 DATE D MARCH 30, 1963, BAFFLES ARE BEING INCORPORATED INTO THE GYRO NEAR THE PLEXLEADS TO PRECLUDE PAILURE FROM FLOM OF P LOATATION MATERIAL.	HTS INTO APPLICABLE TRO NEAR THE PLEXLEA	PROCEDURES DS TO PRECI	. CREF MENO	SSG-E-SOGS DATE	
AUTOFILOT - SQUARE - A/B GTRO PACKAGE	P1-6CO-U1-E1	COMPOSETE-B FACT	621129	ETA YES YES	**	88183
FAILURE WOOE-ERRATIC OF THE HEABURENENT CHANGES	IC GPEKATION. MEABUREMENT 8384X, SPIN MOTOR TEST QUIPUT WAS EPRATIC THROUGHOUT THE TEST. MOST OF INCES SCRE MOT OF A NATURE TO BE VALID INDICATIONS OF STRO SPEED ERRORS.	MOTOR TEST OUTPUT WAS EPRATIC THR. INDICATIONS OF STRO SPEED ERRORS.	EPRATIC THE	ROUGHOUT TH	E TEST. HOST OF	
SYSTEM EFFECT-ERRATIC CRERATION, MESSURENET IBLE CAUSE IS AN AUTOMICOT CIRCUITAY PROSEEN.	SYSTEM EFFECT-ERRATIC OPERATION, MESSURENENT SSSAX SPIN MOTON TEST CUTPUT WAS EPRATIC THROUGHOUT THE TEST, ONE POSS BLE CAUSE IS AN AUTOFILOT CIRCUITAY PROSILEM.	ITON TERT CUTPUT HAS	EFRATIC TE	TOURNOT THE	E TEST, ONE POSS	
WENTELE EFFECT-MONE.						
CORRECTIVE ACTION-INVESTIGATE.	#TIGATE.		ages an entropy agency year for a			
California y a managagana y again					programme and programme pr	
	արդիածառակացիացի անար արդ ան է ընչև և Դեր և այր բեռի ինչեցներ ար եպարասինում են տարր բողանցեր՝ արբեր և այր որպ -	ARTINE TO ARTINE STATE AND AND AND AND ARTINESS OF THE PARTY OF THE PARTY.	AND AND ADDRESS OF THE PARTY ADDRESS OF THE PARTY AND ADDRESS OF THE PARTY ADDRESS OF THE PARTY AND ADDRESS OF THE PARTY AND ADDRESS OF THE PARTY	***************************************	PAGE 0879	_

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STSTEM SUB-STSTEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	SITE TINE DIF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOPII,OT-SAUNE-A/B	A-88-04-4018 67RO, RATE	FAR 27-04874-3	321127	FACTORY	YES HONEYMELL NO JITSSOSAZ	007340
FAILURE HODE-OUT OF TOLERANCE, BYRO E HIGH MALL VOLTAGE WAS HOT LEARNED.	LERANCE, BYRO HAD HIGH MULL QUIPUT VOLTAGE. IN-PHASE COMPONENT WAS 54 HILLIVOLTS. HOT LEARNED.	VOLTAGE. IN-PHASE CO	POSENT MA	9 94 MILLI	WOLTS. CAUSE OF TH	
CORRECTIVE ACTION-HOME.						
ASTOFILOT-SQUARE-A/B GYRO PACKAGE	A-88-04-3598 6YRO-DI SPLACENENT	FAR 27-41002-855	621127	BYCAMORE	BYCAMORE YES KEARFOTT MO	250260
FAILURE MODE-ELECTRICA & CONFIRMED AND WAS DUE	FAILURE MODE-ELECTRICAL OPEN. THE SPIN-NOTOR ROTATION-DETECTOR (SMRD) LIGHT GAVE A NO-60 INDICATION. THE FAILURE MA S CONFIRMED AND WAS DUE TO A BROKEN PHASE B PLEXLEAD IN THE PITCH DISPLACEMENT 67RO.	TECTOR (BARD) LIGHT 6 HE PITCH DIBPLACEMENT	AVE A HO-G GYRO.	O INDICATI	ON. THE FAILURE WA	
CORRECTIVE ACTION-60/C INCORPGED MARCH E0,1963). THE VENDOR IS F PLOATATION MATERIAL.	CORRECTIVE ACTION-GD/C INCORPGRATED NEW HANDLING REQUIRENENTS INTO APPLICABLE PROCEDURES (REF. NEMO 556-2-5063 DATE HARCH ED.1963). THE VENDOR IS INCORPORATING BAFFLES IN THE GYRO HEAR THE FLEXLEADS TO PRECLUDE FAILURE FROM FLOM O FLOATATION MATERIAL.	HENTS INTO APPLICABLE THE GYRO HEAR THE FLE	PROCEDURE XLEADS TO	S (REF. M	HO 556-2-5063 DATE	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	AC-63-0001/32-605-88-75 DISPLACEMENT 6YRO	CAPTIVE	756	×	YES	n 11 5 6 6 6
FAILURE HODE-ERRATIC OFERATION.	OPERATION. INADEQUATE STRCHROHOUS SPEED BUILDUF OF THE 67808.	HEED BUILDUP OF THE O	YR08.			
SYSTEM EFFECT-IMPROPER ANALOG S	R ANALOG SIGNALS. THE AUTOPILOT SPIN MOTOR FAILED.	IN MOTOR FAILED.				
VEHICLE EFFECT-NOME.						
CORRECTIVE ACTION-REPLACED THE	LACED THE GYRO CANISTER.					
AUTOFILOT-SQUARE-A/B FYRO PACKAGE	A-98-04-3369C DISPLACEMENT GTRO SMRD	FAR E7-41002-859	621123	ETR	YES KEARFOTT NO	
FAILURE MODE-ELECTRICAL OPEN. DURING 164AL MAS INTERMITTENT. IN ADDITION, THE ROLL-RATE GYRO SIGHAL. THE REPORT INTERMITTENT SHED SIGHAL MAS CAUSED BY CONTACT WITH THE PHASE-A MICH MAS E MOTOR SIDE OF PHASE-B. AND THE CLIF	TION, TEFOR SE BAC TH MA	THE ROLL DISPLACEMENT CYRO SIGNAL MAS 180 DECREES OUT THE ROLL DISPLACEMENT CYRO SIGNAL MAS 180 DECREES OUT TED FAILURE MAS CONFIRMED AND MAS CAUSED BY DRCKEN PHAS INTERNITTENT CONTACT OF THE BROKEN FLEXLEADS. THE 18 KWARDS SMICH RESULTED BECAUSE THE BROKEN PHASE-B FLEXIS ALSO EROKEN. THE HOT SIDE OF CHASE-B WAS RESTING ON THE HOT PHASE-A POST SHOWED SEVERE ARC MARKS.	DECREES DECREES THE BLASE BY BROKEN THE PLASE BY	TOR ROTATI OUT OF PHASE A AN E 160 DEGR LEXLEAD HO ON THE HO	ROTATION-DETECTOR) SHRD) SOF PHASE WITH RESPECT TO BE A AND B PLEXLEADS. THE DEGREE SIGNAL REVERSAL RAD HAD PLIPPED OVER MAKINE HOTOR PHASE-A POST. THE	n ⊢ I
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<u></u>
OF PROCEDURE 27-84443-1 A SPIN-MOTOR-ROYATION- DETECTOR (3MRD) NO-60 MAS ED AND WAS DUE TO A SROKEN SHRD FLEXLEAD IN THE ROLL DISPLACEMENT 6780 (P. 1888) OF THE VENDOR THROUGH INCORPORATION OF A HEAVIER PLEXLEAD.
AREN BY THE VENDOR THROUGH INCORPORATION OF A HEAVIER PLEXIEAD.
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8787EH 818-8787EH	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	SITE PRI	SITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	
AUTOPILOT-SQUARE-A/B GYNO PACKASE	#P-80-04-3858P 67RO-RATE	FAR 27-41703-808	*111120	OH NTW		•••
FAILURE HODE-OUT OF TOL DETECTOR (BMRD) BISMAL. ACRACE (P/N 27-41002-913 TOPILOT BYROGGOPE PACRAS	FAILURE MODE-OUT OF TOLERANCE, DURING A RUN OF PROCEDURE 27-94445-1 A NO-GO WAS RECEIVE FOR THE SPIN-HOTOR ROTATION DETECTOR (SHED) SIGNAL, THE SUBJECT RENOTE-BATE SYROSCOPE PACKAGE WAS TRETED WITH ITS MATCHED AUTOFILDT SYROSCOPE PACKAGE (P/N 27-41DDE-913) S/N DOS-DOEL) RECEIVED FOR FAILURE ANLYSIS ON 1.R.845247. THE FAILURE WAS FOUND IN THE AUTOPILOT SYROSCOPE PACKAGE, THERE WAS NO PAILURE IN THE RATE-6YRO PACKAGE.	P-94445-1 A NO-GO WA ACKAGE WAS TESTED Y E ANALYSIS ON 1.R.84 -67RO_PACKAGE.	A RECEIVE ATH ITS MA 19247, THE	FOR THE SPI TCHED AUTOF	N-HOTOR ROTATION ILLOT GYROSCOPE P FOUND IN THE AU	
CORRECTIVE ACTION-HOME.	•					
AUTOPILOT-SQUARE-A/B 67RO PACKAGE	A-9F-04-4186-F RATE GYRO	FAR E7-45045-805	105F	PLATTABU NO RGH NO		061140
FAILURE HODE-FAIL DURIN YAIS COULD NOT CONFIRM T HOMERATIVE TEST EQUIPM	FAILURE HODE-FAIL DURING OPERATION. THE TWO-RATE GTROSCOPE PACKAGE WAS REJECTED DURING A MARCHE PROCEDURE RUN, AMAL Tais could not comfirm the reported FAILURE AND CONCLUDED THAT THE REPORTED FAILURE INDICATION WAS DUE TO FAULTY AND INOMERATIVE TEST EQUIPMENT. THE MAPCHE POWER SUPPLY AND THE 400-CYCLE POWER SUPPLY MERE REJECTED AT THE SAME TIME.	PACKAGE WAS REJECTE 1AT THE REPORTED FAL E 400-CYCLE POMEN SH	D DURING A	HAPCHE PRO ATION WAS I	CEDURE RUN. AMAL UE TO FAULTY AND THE SAME TIME.	
CORRECTIVE ACTION-MONE.	COMPECTIVE ACTION-MOME, FAILURE NOT CONFIRMED.			conjectantisti asymptomanowski	, principal proprieta de la constitución de la cons	
AUTOFILOT-SQUARE-A/B	A-SP-D4-4187-F DIUMLACEMENT GYRO	FAR E7-41002-855	103F 621128	PLATTSBU YES RGH NO	• -	091267
FAILURE WOE-FAILED TO C RE 27-98401 CARD 304. AND ATION WAS DUE TO EITHER T THE AS THE GYRO PACKAGE.	FAILURE WOE-FAILED TO OPERATE AT PRESCRIBED TINE, THE AUTOPILOT SYROSCOPE PACKAGE REPORTEDLY FAILED MARCHE PROCEDURE ZA-8461 CARD 364, AMALYSIA COULD FIND NO FAILURE AND CONCLUDED THAT THE MOST PROBABLE CAUSE OF THE FAILURE INDIC ATTON MAS DUE TO EITHER THE 113-WOLT 400 CPS SYROSCOPE POMER SUPPLY OR THE MARCHE POMER SUPPLY REJECTED AT THE SAME TIME AS THE GYRO PACKAGE.	PFLOT GYROSCOPE PAC SCLUDED THAT THE WORL E SUPPLY OR THE WARC	KACE REPOR IT PROBABLE HE PONER 8	TEDLY FAILE CAUSE OF 1 UPPLY REJEC	D MAPCHE PROCEDU ME FAILURE INDIC TED AT THE SAME	
CORRECTIVE ACTION-MOME.	CORRECTIVE ACTION-MOME, FAILURE MOT COMFIRMED.	•			ey disebindipalanya disebina	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	HG-89-04-3501-P RATE 6YRO 848D	FAR B7-41704-608	42 1107	FACTORY YES	YES 60/C NO	******

PAGE 038E

FAILUNE MODE-OUT OF TOLERANCE, DURING FACTORY CHECKOUT THE TAM RATE 6790 MAD LOW SMND OUTRUT. FAILURE CONFIRMED, AT TRIBUTED TO DENAMBLIZATION OF THE SMND MAGNET. YAW RATE 6780 RETURNED TO YENDOR FOR COMPLETE ANALYSIS.

CORRECTIVE ACTION-NOME.

GENERAL DYNAMICS CONVAIR DIVISION

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BYSTEN-ALRBORNE	DISTRICT THE REVIEW AUTOPILOT SYSTEM-AIRBORNE

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	87.81E.W 848-8787E.W	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	SITE TIME DIF	# 5 0	VENDOR NAME	
<u> </u>	AUTOFILOT-SQUARE-A/B	A-99-04-3377F FILTER-ELECTRICAL, \$9460	7AR 87-04948-3	421107	FACTORY	99	A.C.ELECTRIC	******
	FALLURE WODE-OUT OF TOL 909 AND EGRIDDS WERE REJ FILTERS HET THE SPECIFI JOHAL REGUINDHENT IMPOSE BILE.	FAILURE WODE-OUT OF TOLERANCE, BIX SPIN-MOTOR ROTATION-DETECTOR HETWORK FILTERS S/NS 2051913, 2041243, 2041327,2051 808,AND RO31038 WERE REJECTED IN THE FACTORY FOR CAUSES UNKNOWN, FAILURE AND NOT COMFIRM ANY FAILURE AS THE FILTERS NET THE SPECIFICATIONS UNDER WHICH THEY WERE PURCHASED AND RECEIVED. THESE FILTERS WOULD NOT WEET ONE ADDIT TOWAL REQUIRDMENT IMPOSED AT A LATER DATE BUT COULD STILL BE USED IN BOME SELECTED NEXT ABSEMBLIES WHICH ARE COMPATI	ECTOR HETWORK FILTER JOHN FAILNE ANALYS NSED AND MECEIVED. TI E USED IN BONE BELEC	B S/NS 205 IS DID NOT HESE FILTE TED NEXT A	1913, 204 CONFIRM RS HOULD BREMBLIES	A 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, 2041327,2031 Fallure as the Ret one about Ch are compati	,
	CORRECTIVE ACTION-NO CO	CORRECTIVE ACTION-NO CORRECTIVE ACTION. ALL FILTERS PURCHASED AND DELIVERED AFTER 6 AUG 1962 MEET ALL SPECIFICATION S AND THEREFORE ARE NOT MARGINAL REQUIRING SELECTIVE USAGE IN NEXT ASSEMBLY INSTALLATIONS.	NED AND DELIVERED AF	TER & AUG	1962 HEE	411	SPECIFICATION	
	AUTOFILOT-SQUARE-A/B GYNO PACKASE	A-89-04-3566F DISPLACEMENT 67NO MIRE	FAR 7-04250	421107	FACTORY	YES NO	YES KEARFOTT NO C70-2506-000	04040
	FAILURE MODE-ELECTRICAL ECAUSE OF HIGH DRIFT OR RIION OR BREARAGE.	FAILURE MODE-ELECTRICAL OPEN, SEVEN GYROB, S/NS 3023, 3383ABE, 3298B, 3949ABE, 4181, 4212ABDE, AND 3875AB, FAILED B ECAUSE OF HIGH DRIFT OR NO SPIN MOTOR OPERATION. THE REPORTED FAILURES HERE CONFIRMED AND MERE DUE TO PLEXLEAD DISTO RITON OR BREARAGE.	IBE: 3296B; 3949ABE; ED FAILINES HENE COM	4161, 421 FIRMED AND	PABDE, AN	8 0 T	75AB, FAILED B FLEXLEAD DISTO	
	CORRECTIVE ACTION-60/C	CGRECTIVE ACTION-60/C INCORPORATED NEW HANDLING REQUIRENENTS INTO APPLICABLE PROCEDURES. (REF. NE YENDOR HAS ADDED BAFFLES TO THE GYROS NEAR THE FLEX LEADS TO PRECLUDE DISTORTION AND BREAKAGE	NTS INTO APPLICABLE	PROCEDURES TION AND B	. (REF.) REAKAGE (o ≠ ¥ k	HENO 356-2-5063). T OF THE FLEXLEADS.	
	AUTOFILOT-SQUARE-A/B	HG-99-04-3492-F RATE STRO	FAR 27-41705-809	421107	FACTORY	ទីទ		***************************************
	FAILURE MODE-STRUCTURAL LL OF GONY. DISASSEMBLY WHEN THE GYRO WAS SUBJEC	FAILURE MODE-STRUCTURAL. THE AEMOTE RATE GYRO WAS IR/D FOR A HIGH MALL OUTPUT VOLTAGE. THE PITCH-RATE GYRO HAD A MU LL OF GONY. DISASSEMBLY AMALYSIS REYEALED A DISTORTED SET OF QUADMILEVERS, THE QUADRILEVERS MERE PROBABLY DISTORTED WHEN THE GYRO WAS SUBJECTED TO A MECHANICAL SMOCK.	A HIGH MULL CUTPUT F QUADAILEVERS, THE	VOLTAGE. T BUADRILEYE	HE PITCH	7 A TE	VOLTAGE. THE PITCH-RATE GYRO HAD A NU QUADRILEYERS WERE PROBABLY DISTORTED	
	CORRECTIVE ACTION-RECOR	CORRECTIVE ACTION-RECOMENDED USING RUBBERIZED HAIR OR INSERT CATALYST FOAH IN HARD SURFACED MANDLING AREAS.	EAT CATALTST FOAH IN	MARD SURF	ACED MAN	0 L I M	AREAS.	
	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	4-99-04-3564F CIRCUIT BOARD-TRANSISTOR	7AR 89-04903-008	901129	FACTORY	<u> </u>	GENERAL ELECTR	
	FAILURE MODE-OUT OF TOL MAT THE TRANSIBTOR NET A PROBABLY CAUBED BY BOME	FAILURE HODE-OUT OF TOLERANCE. DUBING BENCH TESTS, THE TRANSIBTOR APPEARED TO BE HOISY. FAILURE ANALYSIS REVEALED T HAT THE TRANSISTOR HET ALL HAMMFACTURERS SPECIFICATIONS AND HAS HOT PARTICULARLY HOISY. THE ORIGINAL MALFUNCTION WAS PROBABLY CAUSED BY SOME DEFECT IN THE HEXT ASSEMBLY CIRCUIT BOAND.	HSIBTCH APPEARED TO HAB HOT PARTICULARLY BOARD.	ME NOISY.	FAILURE	אני	SIS REVEALED T ALFUNCTION WAS	
· · · · · · · · · · · · · · · · · · ·		Andrew Andrew Communication and Production and Prod	A COMPANY OF THE PARTY OF THE P		de la constitución de constitu		PAGE 0363	

GENERAL DYNAMICS CONVAIR DIVISION

18 JUN 1868

	FAILED COMPONENT NAME	PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	SIF OTH VENDOR PART NO	3
CORRECTIVE ACTION-PACTORY PERSONNEL WERE RESUE. A FAILURE OCCURS, NO FURTHER CORRECTIVE ACTION.	NHEL HERE REQUESTED TO FORMARD ALL CIRCUITRY INVOLVED FOR FAILURE ANALYSIS WHENEVER RECTIVE ACTION.	ND ALL CIRCUITAY IN	VOLVED FOR FAIL	JAE AMALYSIS WHENE	**************************************
AUTOFILOT-SQUARE-A/B A-89-D4 GYRO PACKAGE SHED	A-99-04-4195-C SHRD	7AR R7-45186-5	87F FACTORY	17 YES 60/C NO	•
FAILUPE MODE-FAIL DURING OPERATY.	FAILUPE HODE-FAIL DURING OPERATION. THE SPIN-MOTOR ROTATION-DECTOR SUBASSÉMBLY REPORTEDLY HAD NO OUTPUT. PAILURE AN Altsis was cancelled because the subject surd subassémbly was scrapped.	-DECTOR BUBABBEMBLY B SCRAPPED.	REPORTEDLY HAD	NO OUTPUT. PAILURE	
CORRECTIVE ACTION-NOME.					
AUTOPILOT-SQUARE-A/B A-98-04-3394F GTRO PACKAGE AMPLIFIER-316	A-98-04-3394F Amil (FIER-316mal	FAR E7-4100E-885	421105 ETR	9 9	***************************************
FAILURE HODE-OUT OF TOLERANCE, D. L. MAX ALLOWABLE DEVIATION IS 5 PT THE MISCALIBRATION WAS HOST PROBE WAS BY AGE TEST EQUIPMENT.	FAILURE HODE-OUT OF TOLERANCE, DURING PACKAGE TESTS, THE YAW RATE GAIN MAS MEASURED TO BE 3.75 PERCENT BELOW MONIMA. L. CHAX ALLOWBLE DEVIATION IS 3 PERCENT), THE FAILURE MAS COMPIRED AND MAS DUE TO A MISCALIBRATED SIGNAL AMPLIFIER. THE MISCALIBRATION WAS HOST PROBABLY THE RESULT OF AN IMPROPERLY SET 11S VAC IMPUT TO THE GYROSCOPE PACKAGE. FAILURE IMAS BY AGE TEST EQUIPMENT.	M RATE GAIN MAS MEANTERED AND MAS DUE	SURED TO BE 3.7: TO A MISCALIBRA WILL TO THE GYRK	PERCENT BELOW HO ITED SIGNAL AMPLIFI DACOPE PACKAGE, FAI	1 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
CORRECTIVE ACTION-A NEW METER ON	CORRECTIVE ACTION-A NEW METER ON THE 115 VAC INPUT DIRECTLY AT THE WINGSCUPE FACKANE MAS INSTALLED ON THE FACTOR ST SETS IN MAY 106E. REF. CIC 7103G-947-3-477; WAP 3687.	AT THE WINCOLLETE TO	ACKANE MAS ATPATA	יייי יייר אייי	- 1
AUTOFILOT-EQUARE-A/B FAR A-9 GTRO PACKAGE AMPLIFIE	FAR A-89-04-4105F AMPLIFIER/RESIETOR	FAR 27-41588-807	6211DE FACTORY	ry YES	*****
FAILURE MOG-STRUCTURAL. AMPLIFII OR THE MULLING AMPLIFIER IN THE TWE MULLING AMPLIFIER.	FAILURE HODE-STRUCTURAL. AHFLIFICR WAS REJECTED WHEN, DURING REMORK, RESISTOR R-8 WAS FOUND CRACKED. R-8 IS A LOAD FOR THE MALLING AMPLIFIER IN THE TEST SET. ITS VALUE CHANGED FROM LOGOCHMS TO 1800 CHMS DIR. TO EXCESSIVE GUIPUT FROM THE MALLING AMPLIFIER.	G REWORK, RESISTOR I FROM 10000HMS TO 10	R-6 IMS FOUND CI	RACKED. R-B 18 A LC EXCESSIVE OUTPUT	4 0 K
CORRECTIVE ACTION-RAR A-59-04-36	CORRECTIVE ACTION-RAR A-29-04-3671 INFO REQUESTED THAT MULLING AMPLIFIER OUTPUTS BE CHECKED SO THAT ALL DISCREPANCE 8 will be corrected.	ING AMPLIFIER OUTPU	TS BE CHECKED SA	2 THAT ALL DISCREP	Ţ.
AUTOPILOT-SQUARE-A/B A-98-04- GTRO PACRAGE CIRCUIT	A-98-04-4085-F Circuit Board-Gafacitor	FAR 27-41002-655	16F ETR 621102	¥ 04	
MODE-ELECYRICAL OPEN-DUR DIBPLACEMENT 67RO BIGHAL	FAILUME MODE-ELECYMICAL OPEN-DUMING PLIGHT ACCEPTANCE COMPOSITE TEST PITCH SIGNAL AMPLIFIER OUTPUT DID NOT ME PITCH DISPLACEMENT GYRO SIGHAL, FAILUME COMPIRMED DUE TO DEFECTIVE WELD JOINT IN TANTALUM CAPACITOR C-B,	BITE TEST PITCH SIG Depective weld join	MAL AMPLIFIER OF IN TANTALUM C.	CAPACITOR C-B.	
				n sean selestimante enagen.	

CONVAIR DIVISION

18 JUN 1966	AN MODELE - MAINEY TO TO TO TO THE WASHINGTON THE WASHINGTON TO THE WASHINGTON TH	TOPILOT BYBIEH-AIRBOR	¥				
87.3 TEN	TEST/REPORT HUNGER	DIF DATA BOURCE	VEHICLE	31.16	PRI VENDOR	VENDOR NAME	
Sub-staten	FAILED COMPONENT NAME FART NUMBER		VENDOR OF		90 or 80	RRECT PRO	*0**74
BLEN OF DEPLECTIVE WELD JOINTS.							8.27.208
AUTOFILOT - SQUARE - A /B GTRO PACKAGE	AA62-DIDA/FI-6CO-DI-16 PITCH 6YRO AMPLIFIER	COMPOSITE-B FACT	101125 451102	# #	g		
FAILURE HODE-OUT OF TOLIN.	TOLERANCE, WHILE RUMMING GAP TEST IT WAS OBSERVED THAT THE PITCH CTRO AND LIPIER HAD CHANGED GAI	44 COSERVED THAT THE	. Р. ТСН СТ	IO AMPIPIE	A HAD CH	AMÉED GAT	
SYSTEM EFFECT-INFROPER	ANALOS SIGNALS. ERRATIC MOVEMENT OF DOOSTER ENGINES IN PITCH.	P DOORTER ENGINES IN	PI TCH.				
WENICLE EFFECT-NONE.							
CORRECTIVE ACTION-67RO	CAN REMOVED AND IR/D. REPLACEMENT	REPLACEMENT CAN INSTALLED.					
AUTOPILOT-SQUARE-A/B FTRO PACKAVE	A-9R-04-3559" PITCH DISPLACEMENT SYRO	FAR 27-41002-655	421020	£	ğ Q		******
FAILURE MODE-OUT OF TOL TION TRANSFORMER AND OTH ITATION TRANSFORMER MAS	TOLERANCE. INSUFFICIENT MOVEMENT ON POSITIVE, TORQUING GAIN TEST. IT MAS REPORTED THAT AN EXCITA OTHER COMPONENTS MERE REJECTED AT AMPROXIMATELY THE SAME TIME AS THIS REPORTED FAILURE. THE EXCLASS MOT RECEIVED FOR FAILURE AMALYSIS.	SATTIVE, TORQUING GAIN SOXINATELY THE BANE I	1 TEST. 17	MAS REPORTE	ED THAT	AH EXCITA	
CORRECTIVE ACTION-NOME.	FAILURE NOT CONFIRMED.						
AUTOFILOT-SQUARE -A/B GYRO PACKAGE	AX62-D061/AR141-Q-1-131/FC-CO-D1-0 COMPOSITE-FACTORY D06-D17 AMPLIFIER	-0 COMPOSITE-FACTORY	1310	FACTORY	9 9 9		11360
FAILURE MODE-FAIL DURING ELVO INPUT AT 184 SECONDS LLING AMPLIFIER IN THE AGE	DURING OPERATION. CHANNEL 7 OF SANBORN RECORDER MONITORING SUSTAINER PITCH INDICATED A POSITIVE S ECONDS WHEN S NEGATIVE PITCH PROGRAM TORQUING SIGNAL WAS EXPECTED. THIS WAS CAUSED BY A FAULIT NU THE AGE GTRO MULING LOOP.	RECORDER MONITCRING ! RAUING BIGNAL WAS EXI	HOSTAINER (117CH 11010	ATED A P	FAULTY NU	
SYSTEM EFFECT-IMPIOPER ANALOG SIGNAL. WE PITCH PROGRAM FORBUING WAS EXPECTED.		AT 188 SECONDS SUSTAINER PITCH INDICATED A POSITIVE SERVO INPUT WHEN A NEGATI	A POSITE	NE BERNO II	FCT SER	A MEGATI	
VEHICLE EFFECT-COMPOSIT	VEHICLE EFFECT-COMPOSITE RESCHEDULED. POST-COMPOSITE TESTING REQUIRED.	ING REQUIRED.					<u></u>
CORRECTIVE ACTION-REPLA	CORRECTIVE ACTION-REPLACED THE FAULTY WALLING AMPLIFIER IN THE AGE GYRO MULING LOOP.	N THE AGE GYRO MULLI	46 LOOP.				
AUTOFILOT-SQUARE-A/B EYRO FACKAGE	A-89-04-4021F 67RO, RATE	# 4 P B B B B B B B B B B B B B B B B B B	\$20128	FACTORY	YES JRSIDIAR NO	7 7	
FAILURE HODE-CONTANINAT	FAILUNE MOSE-CONTANINATION. 6780 MAD LOM TORBUING BENBITIVITY. FAILUNE MAB ATTRIBUTED TO A CONTANINATED GIMBAL BEAR 1886.	VITY, FAILURE WAS AT	TRIBUTED T	C A CONTAN	14 CO 41	HBAL BEAR	
						PAGE 0365	T-7

	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORNE	¥.		
201878 201878	TEST/REPORT NUMBER FALLED COMPONENT NAME	DIF DATA BOURCE PART HUMBER	VEHICLE BITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO	PRI VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-VENDOS	WENDOR INSTITUTED 100 PERCENT INSPECTION OF ALL GIMBAL BEARINGS FOR CONTAHINATION.	ON OF ALL GINBAL BEAR!	WES FOR CONTABINATION	ż	096313
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-4140-F GYRO-DI 3PLACENENT/ANPLIFIER	FAR 87-41378-015	SELDES FACTORY Y	YES NO	*****
FAILURE MODE-FAIL DURING HE CUTPUT TRAUSFORMER TR OF THE TRAUSFORMER OR A I RTS.	FAILURE WODE-FAIL DURING OPERATION, THE TORGUER AMPLIFIER FAILED MITH BOTH OUTPUT TRANSISTORS (2M538) SHORTED AND ' HE CUITPUT TRANSFORMER TE BURNED INSIDE, IT IS NOT RHOWN WHICH PIECE PART FAILED FIRST, SINCE A SHORT IN THE PRIMARY OF THE TRANSFORMER OR A SHORT IN EITHER TRANSISTOR WOULD RESULT IN EXCESSIVE CURRENT WHICH COULD DAMAGE THE OTHER PIECE.	R FAILED MITH BOTH OUT HICH PIECE PARI FAILED RESULT IN EXCESSIVE CL	PUT TRANSISTORS (ENS) PERST, SINCE A SHUK MRENT NHICH COULD DA	159) SHORTED AND T IT IN THE PRIMARY INAGE THE OTHER PA	
CORRECTIVE ACTION-THE NU F WINDINGS.	CORRECTIVE ACTION-THE MANUFACTURER OF THE TRANSFORMER IS USING PERFORATED BOBSINS TO INSURE ADEQUATE IMPREGNATION VINDINGS.	(BING PERFORATED BOBB	IINS TO INSURE ADEQU	ITE IMPREGNATION O	
AUTOFILOT-SQUARE-A/B	A-99-04-4100-F AJFLER	FAR E7-41676-807	621025 FACTORY N	₽ ₽	493479
FAILURE WOE-FAIL DURING AL COMPOMENTS WERE BURNED OF TORQUE AMPLIFIER.	FAILURE MODE-FAIL DURING OPERATION, SIGNAL ANPLIFIER STARTED TO SMOKE DURING TESTS. VISUAL EXAMINATION SMOKED SEVER L. COMPONENTS WERE BURNED DUE TO BURNED TORBUE AMPLIFIER IN SAME MODULE, SEE FAR A-59-04-4140-F FOR PRIMARY FAILURE F TORBUE AMPLIFIER. COMPECTIVE ACTION-MOME REQUIRED, BURNING OF SIGNAL AMPLIFIER WAS SECONDARY FAILURE.	RTED TO SHOKE DURING T IN SAME MODULE. SEE FA PIER WAS SECONDARY FAI	SHOKE DURING TESTS. VISUAL EXAMINATION SHOWED SEVENMOLLE, SEE FAR A-88-04-4140-F FOR PRIMARY FAILURE.	TION SHOKED SEVER	
AUTOFILOT-SQUARE-A/B	A-98-D4-3556F DISPLACENENT GYRO	FAR E7-41002-855	ES MATE	YES 70	983830
FAILURE MODE-FAIL DURING NO DISCREPANCY MAS FOUND OKINATELY THE SAME TIME !	DURING OPERATION, DURING A MAPCHE CHECKOUT, A MICHG SIGNAL WAS SENT OUT, THE GYRO WOULD NOT MULL. FOUND, IT MAS REPORTED FAILURE, NOWE OF THESE COMPONENTS NERE RECEIVED FOR AMALYSIS.	KOUT, A MROME SIGNAL Y TION TRANSFORMER AND C THESE COMPONENTS MERE	AS SENT OUT. THE GYR DIHER COMPOMENTS NERE F RECEIVED FOR AMALYS	TO WOULD NOT MULL. I. REJECTED AT APPR 113.	
CORRECTIVE ACTION—NO. 1 STEAM OF 104-3474-P 6780 PACKAGE DISPLACEMENT 6780	##-80-04-3474-P DISPLACEMENT 6/RO	FAR 27-410CR-913	GELORE WIR	22	
FAILURE HODE-FAILED DUR! LICAL MARNESS WAS SHORTEI NPILICAL PLUG.	FAILUME HODE-FAILED DURING OPERATION. THE AUTOPILOT GYRO PKG. WAS IR/D FOR A CONFIDENCE CHECK WHEN THE MISSILE UMBI Lical Harness was shorted by Moisture, Retest of the 67RO PKG DID NOT Disclose any Failures induced by the shorted u Notlecal Plus.	PKE, MAS IRZD FOR A C PKE DID HOT DISCLOSE	COMPIDENCE CHECK WHEN ANY FAILURES INDUCEE	THE MISSILE WEST	
	eganangalandak,a-primerandah dapi nag-18 o-1909 — файлагандардагандай di 1919 dibandahan yak			PAGE 0384	

CONVAIR DIVISION

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	FAILED COMPONENT NAME	PART NUMBER		1146 014		VENDOR PART NO	
	MERFACTIVELY BEAL DAMILICAL INTERFACE.	AFAL IMBILICAL INT	RFACE.				
AUTOFILOT-SQUARE-A/B	3P-8D-04-3473 REMOTE-RATE 6YPO	FAR 27-41703-809	#E1022	Ę	3 3		:
FAILURE MODE-CUT OF SPEC S IR/D FOR A CONFIDENCE	FAILUME MODE-OUT OF SPECIFICATION. THE ASSOCIATED UMBILICAL PLUG HAD A SHORT CAUSED BY MOISTURE, THE GYRO PACKAGE M AS 187D FOR A COMFIDENCE CHECK. 29 INDUCED FAILURE MAS FOUND IN THE GYRO PKG.	PLUE HAD A SHORT O	CAUSED BY	OI STURE.	THE EVRO	PACKAGE W	
CORRECTIVE ACTION-ECPLE	CEP1174 INCORPORATED TO IMPROVE THE INTERFACE SEAL OF PLUG.	FACE SEAL OF PLUE.					
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-94-04-4099-F DISPLACEMENT 6VRO	FAR 27-41002-859	72° 621020	DAFB	YES KEARFOTT NO	110	*****
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME, FAILURE NOT CONTINED. NO ADDITIONAL INFORMATION COLLD DE OBTAINED FROM AF OFERATIONAL BITE	L INFORMATION COLL	S SE OBTAIL	ED TROM	AF OPERATI	OMAL BITE	
AUTOFILOT-SAUARE-A/B	HG-A8-04-3482-F RATE GYRO ENITTER BOARD	FAIR E7-41703-809	1300	FACTORY	3 9		902744
F.ILUME MODE-ELECTRICAL MAL. FAILURE WAS TRACED ' CORECTIVE ACTION-INSPE A1D WHEN CHECKING TERMI	IICAL OPEN, THE RATE GYRO PACKAGE WAS IR/D WHEN THE PITCH SIGNAL WENT NEGATIVE FOR A POSITIVE SIGNICED TO AN UNSCLDERED WIRE PRON GYRO TO TERMINAL 14 ON THE ENITTER BOARD IN THE RATE PACKAGE. HAPPECTION INSTRUCTED IT:: PERSONNEL WORKING ON SIMILIAR ASSENBLIES TO USE TWEEZERS OR A SOLDERING TERMINAL WIRE SOLDERED JOINTS.	D WHEN THE PITCH SI ERMINAL 14 ON THE I	IGAAL MENT EMITTER BO EMBLIES TO	NEGATIVE AND EN TH USE THEE	FOR A POL	HAGE.	
1 -	A-88-G6-AGG8F DISPLACEMENT GYRO POMER AMPLIFIER	FAR 27-45202-801	*101*	PACTORY	2 9		•
FAILUNE MODE-ELECTRICAL N & BHORT CIRCUIT EXTERN	FAILURE MODE-ELECTRICAL SHORT. TWO CHOKES IN POMER AMPLIFIER 27-41381-1 MERE BURMED TH S COMDITION MAS ATTRIBUTED T O A SHORT CIRCUIT EXTERMAL TO THE GYRO CANISTER. THE REASON FOR THE SHORT CIRCUIT WAS MIT LEARNED.	R 27-41361-1 MERE FOR THE SHORT CIRC	BURNED TH	S CONDITI	ON MAR AT	T GBTUEST	
CTION-NONE.	CORRECTIVE ACTION-NOME, NO CAUSE OF THE SHORT CIRCUIT NOT DETERNINED.	ETERMINED.	We produce the second of the second	April 1995 Annie 1995	in mentap spire dell'anticomitant		·
na poddiste nazagemnijnapilnitore		Spiritual and the spiritual state of the spir				PAGE 0387	-

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AND PROPERTY OF THE PROPERTY OF THE PARTY NAME O		DIFFICUATIES REVIEW-AUTOFILOT STREM-FIRBORNE	DPILOT SYSTEM-AIRBO				r
Dualink operation, durink a manufacturink TEST, THERE was no du put face channels of a control sound testines the face channels as a second of the testines of a face channel testines of a second of the testines of a second of the testines of a second of the testines of	SVSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	MUHICLE SITE		VENDOR NAME ENDOR PART NO	
DOUBLE CREATION. DEBING A MANUFACTURING TEST, THERE WAS NO OU PUT FROM CHANNELS 1 OR E OF THE ITS WORTHOW. TESTING CONTINUED. TO STATE THE CONTINUED. TO STATE THE CONTINUED CONTINUED. TO STATE THE CONTINUE COALD CAY HAVE AERN CA TO BIOGRAPHICS. TO STATE THE COALD WAS NOT THE TOO TRANSISTOR SIT THE OF FAILURE COALD CAY HAVE AERN CA TO STATE COAT THE TOP CORRECTIVE ACTION TO STATE COAT THE TOP CORPECT A CIRCUIT GAMES PROVENTING DAWING TO SHIM MOTOR RUTATION DETECTION ISSUED TO THE TOTAL AFFORMATION. ACO-CA-GOTT A CIRCUIT GAMES PROVENTING DAWING TO SHIM MOTOR RUTATION DETECTION ISSUED TO THE TOTAL AFFORMATION. ACO-CA-GOTT A CIRCUIT GAMES PROVENTING DAWING TO SHIM MOTOR RUTATION DETECTION TO WENCHELD TO WENCH REPAIR. F TOLERANCE—EVEN HAD RIGH MAI. OUTPUT. F TOLERANCE—EVEN HAD TO VENCOR FOR REPAIR. F TOLERANCE—EVEN HAD TO VENCOR FOR HEAD COUPPUT THAN TOLEN HAD TO THE FAILURE HAD TO FOR THE HAD CONTROL THAN THEN HAD TO FOR THE HAD CONTROL THAN THAN THE HAD TO FOR THE HAD		A-08-04-3363F CIRCUIT BOARD	FAR 27-43220-3		NO NO		****
PARTIENTLY APPLIED. EXTENSILY APPLIED. A-LO-04-017-C EXTENSILY APPLIED. NO WESTGELL A-RO-04-017-C A-LO-04-017-C A-LO-04-017-	FAILURE MODE-FAIL DURI EN CHCUIT BOARD, FUNCT A SHORTED TEST INPUT E AIMED GMEM-CIRCUITED DI USED BY MISAPPLICATION	ING OPERATION, DURING A MAMPACTURING INOMAL TESTING CONTINUED THE FAILURE. SIGNE (CRE) AND LOW GAIN OF TRANSIBTO CODES (CRE) AND CRE) AND HIGH I CBO TO YOLTAGE.	TEST, THERE MAS NO CHANNEL I SUB-ASSEN R 61. CHANNEL E BUS ANBISTOR 61. THIS T	OU-PUT FROM CHANGE WENT PAN ET-ASSET PAN ET-	WELS 1 (R Z OF THE LT 189 CONTAINED 8/N 1226 CONT HAVE BEEN CA	
A-CO-COA-4017-C EP-04374-8 FOLDRAMEE-EFRO HAD HIGH MALL OUTPUT. A-SO-CA-5544F FOR REPAIR. A-SO-CA-5544F FOR PERAIR. A-SO-CA-5544F FOR PERAIR. FOR PERAIR. FOR PERAIR. FOR PERAIR. A-SO-CA-5544F FOR PERAIR. A-SO-CA-5544F FOR PERAIR. FOR PERAIR. A-SO-CA-5544F FOR PERAIR. FOR PERAIR. FOR PERAIR. A-SO-CA-5544F FOR PERAIR. FOR PERAIR. FOR PARTICAL BASED AND PARTICAL BASED AND PERAIR. FOR PEREINTENTION OF VOLTARE COULD NOT BE DETERMINED. FOR PEREINMEND. FOR PE	CORRECTIVE ACTION-NO (61NEERS IN AN ATTEMPT) IF VOLTAGE 18 INADVERTI	CORRECTIVE ACTION, RELIABILITY FAILUR TO EFFECT A CIRCUIT CHANGE PREVENTING ENTLY APPLIED.	E AMLYSIS ENGINEERI DAMAGE TO SPIN HOT	A AR E ENGAGED MI ON ROTATION DETEC	708 (вы	ANT DESIGN EN D) CIRCUITRY	
WENCH STOLEDANCE -	AUTOPILOT-SQUARE-A/B	A-1/2-04-4017-C 67RO-RATE	FAR 27-04574-8			INSEAPOLIS HO PEYVELL RSIOIAE	****
F SPECIFICATION. THE SPIN-HOTOR ROTATION DETECTOR (SHED) CUTPUT WAS LOW. THE FAILURE WAS HOT CONFERS HOTICATED THAT THERE HAS NO FAILURE IN THE SUBJECT 6TRO. A-155-04-3459-F RATE 6TRO SHED F SPECIFICATION. HATE 6TRO IN/D FOR LOW SHED OUTPUT SIGNAL. FAILURE TESTS INDICATED A DEMANMETIZE OH-PETECTOR MACHET. FAILURE CAUSED BY MISAPPLICATION OF EXTERNAL YOUTAGE. HOWE, SOUNCE OF MISAPPLICATION OF VOLTASE COULD NOT BE DETERMINED.	CORRECTIVE ACTION-UNK	HOME GYRO WAS RETURNED TO VENDOR FOR	MCPAIR.	1		11 PACA POL. 18-HO	
OF SPECIFICATION. THE SPIN-HOTOR NOTATION DETECTOR (SHED) CUITATI HAS LOW. THE FAILURE HAS NOT COMPANY LIGHT THERE HAS NO FAILURE IN THE SUBJECT 6780. LITSIS INDICATED THAT THERE HAS NO FAILURE IN THE SUBJECT 6780. A -8-8-04-3488-F RATE 6780 SHED OF SPECIFICATION, HATE 6780 IN/D FOR LOW SHED CUITATI SIGNAL, FAILURE TESTS INDICATED A DEMANATIZE IJON-PETECTOR MACHET, FAILURE GAUSED BY HISAPPLICATION OF EXTERNAL YOUTAGE. SOURCE OF HISAPPLICATION OF VOLTAGE COULD NOT BE DETERMINED.	AUTOFILOT - SALMARE - AVE EVRO PACKAGE	GYAO-RATE	2-45-04-F		ĝ	EYVELL	
A-89-04-8489-F RATE 6YRO 8480 RATERNAL, FAILURE CAUSED BY HISAPPLICATION OF EXTERNAL YOLTAGE. WHISAPPLICATION OF VOLTAGE COULD NOT BE DETERNINED.	FAILURE MORE-OUT OF M TAMED, FAILURE AMALYBII CGHECTIVE ACTION-NOM	RECIFICATION, THE SPIN-HOTOR ROTATION S HADICATED THAT THERE HAS NO FAILURE E. FAILURE NOT COMPIRMED.	DETECTOR (SHRD) OU'	2. THU THE LOW. TH	44114	WAS NOT COM	t
OF SPECIFICATION, MATE STRO IN/D FOR LOW SHED OUTPUT SIGNAL, FAILUME TESTS INDICATED A DE Hom-Petector magnet, Failume Caused By Hisapplication of Kiernal, Yoltase. H-Mone, Source of Misapplication of Voltase Could Not be determined.	AUTOFILOT-BGUANE-A/B	A89-CA-3496-F RATE 6YRO SAND	7AR 87-04874-8	JASIOIAR FACTO		NOVE Y WELL	
		PECIFICATION, MATE 67RO IR/D POR LOW PETECTOR MAGNET, FAILURE CAUSED BY HE	SHED OUTPUT SIGNAL. SAPPLICATION OF EXT	FAILURE TESTS 11	AD 1 CA TED	A DENABARETIZE	
	CORRECTIVE ACTION-WON	E. BOURCE OF HIBAPPLICATION OF VOLTFA	E COULD NOT BE DETE	RHINGO.			
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****	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	PILOT SYSTEM-AIRBOR	¥				-
TYBTEH BUB-BYBTEH	TESTARFORY NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	11 HE 01F	# 5 0	SITE PRI VENDOR NAME TIME DIP OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	A-#R-04-63844	FAR R7-41008-855	621013	WALKER	₽ ₽		
FAILURE MODE-OUT OF TOLERANCE-DURING SYSTEMS TE. AM OUT-OF-TOLERANCE FOR YAW DISPLACEMENT GAIN WI AS CONFIRMED AND WAS DUE TO A MISCALIBRATED YAW I EHENY TRIGGER RETTING IN THE SYROGCOPE TEST BETA.	FAILURE MODE-OUT OF TOLERANCE-DURING BYSTEMS TESTS, A NO-GO MAS RECEIVED FOR CARD 537 OF MAYCHE DECK 451 INDICATING AN CALCREANCE FOR YAN DISPLACEMENT GAIN WAS CONTINUED AND MAS DUE TO A MISCALIBRATED TO AN INCORRECT DISPLACEMENT TRIGGER NETTING IN THE SYROSCOPE TEST SET.	WAS RECEIVED FOM CA INFUT, THE REPORTE FIER, THE MISCALIBRA	IND 337 OF PAILURE 1730H MAS	24 44 6 10 10 10 10 10 10 10 10 10 10 10 10 10	218FL	MAPCHE DECK 451 INDICATING JF HIGH DISPLACEMENT GAIN W DUE TO AN INCORNECT DISPLAC	
CORRECTIVE ACTION-FACTOR	CORRECTIVE ACTION-FACTORY TEST EQUIPMENT WAS REPAIRED ON MOVEMBER 1, 1852.	VEHBER 1: 1852.					
AUTOFILOT-SQUARE-A/B	A-99-04-4139-C 67RO-013PLACD/ENT/84/RD	FAR E7-4100E-887	62 101 2	FACTORY	ğ 9		
FAILURE MODE-FAIL TO OPEL DISPLACEMENT GTRO.	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME, NO SPIN-HOTOR ROTATION-DETECTOR OUTPUT WAS R.CEIVED FROM THE ROLL ISPLACEMENT 67RO.	TOR NOTATION-DETECTO	# 0017PU	MA R.CE	AED A	FROM THE ROLL	
CORRECTIVE ACTION-NOME. A	ACTION-NOME, ANALTSIS MAS CANCELLED AND THE PART REPAIRED BECAUSE MANUFACTURING CONTROL STATED THAT THE A SEARCH-FOR-CATTICAL- MEANNESS PACRAGE.	REPAIRED BECAUSE N	MUFACTURE	# COM		LTED THAT THE	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-4039-F RATE GYRO	FAR E7-04574-3	621010	PACTORY	₹ 2	HINKEAPOLIB-HO NEYNELL JRBIDIAZ	
FAILURE HODE-OUT OF TOLERA TRE HIGH-CUT OF TOLERANG.	FAILURE MOSE-OUT OF TOLERANCE. FAILED TO OPERATE WITHIN SPECIFICATIONS OF MARCHE PROCEDURE 27-38451. ALL READINGS W TRE HIGH-CUT OF TOLERANCE. THE FAILURE NAS NOT COPTINED. MARCHE PROCEDURES HEASURE ONLY TOTAL MULL AND THE 67RO SHO ULD NOT HAVE BEEN REJECTED.	CIFICATIONS OF MAPCIPICHE PROCEDURES HEAL	HE PROCEDU	RE ET-364 TOTAL NUA	151. / -L AN	ALL READINGS W THE GYRO SHO	
CORRECTIVE ACTION-NOWE. FAILURE UNCONFIRMED.	FAILURE UNCOMTRNED.					And the second section of the sectio	
AUTOFILOT-SQUAZE-A/B GYRO PACRAGE	A-99-D4-4027F Gyro Displacement	FAR 7-04850-5	061010	PACTORY	20	YES KEARFOTT NO C70-2506-000	
FAILURE MODE-OUT OF SPECI HE MAS NOT CONTRNED HONE! LEAD, TORBUING NONLINEAR!	PAILUME MODE-OUT OF SPECIFICATION OM TOLERANCE- COMPOMENT UNS REJECTED FOR NOWINEAR TORGUING CHARACTERISTIC, FAILU He was not complymed homever excessive fixed restraint drift was fond. The drift was attributed to a distorted plex Lead, torguing nominearity has attributed to a nomithear torguer amplifier.	AS REJECTED FOR NOW SAS FOUND. THE DRII	THEAR TOR	AUTHE CHA	WACTI TO A S	ERISTIC, FAILU DISTORTED FLEX	
CORRECTIVE ACTION-NOWE OF ACEMENT 6'NO. REARFOIT IM.	CORRECTIVE ACTION-NOME ON REPONTED FAILUME, 60/C INSTITUTED SPECIAL HANDLING AND HARM UP REQUIREMENTS FOR THE DISPL Acement 6780. Keapfott incomperated bapples in the 6780 to prevent plex lead damage due to plom of plotation materia L.	SPECIAL MANDLING AN REVENT PLEX LEAD DA	1 300 39V	REQUIRES	#ENTS	FOR THE DISPL	

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VENDOR NAME VENDOR PART NO	MINNEAPOLIS-HO HEYNELL JRS101AE	SED LIMITS. THE CAUSE TON, THE CAUSE TON, THE CAUSE TON THE CAUSE TON TON THE CAUSE TO	60/C TO 7E37 EQUIPH		HINEAPOLIS HO NEVELL JRS101AZ	MDLING CONTAIN	HIMMEAPOLIS-HO NEYNELL JRS101AE	LTAGE. SEVERE	UAL EXAMINATIO
# 0 # 0	# £	TICATI	22 8		ž ð	5	A C	\$	ž .
SITE PRI TIME DIF OTH	FACTORY	WITHIN PRI LOW SPECII RIBUTED TO PPLICATION	FACTORY RE 148 TR		FACTORY	RTS IN CY	FACTORY	WALL OUTPI	OCTOBER 1
VEHICLE DATE DIF	6 21010	D OPERATE NEE MAS BE AND DIST WOLTAKE A	62 1010		62100	NDOED INSE	6 61008	3	1, 1962, 2 1-1 DATED
DIF DATA BOURCE PART NUMBER	FAR 27-04574-3	MAPCHE RUM, THE GYRO FAILED TO CPERATE WITHIN PRESCRIBED LIMITS. ROTATION DETECTOR (SMRD) VOLTAGE MAS BELOM SPECIFICATION, THE CAU ES,1962 MAS SENT TO ALL SITES AND DISTRIBUTED TO FACTORY PERSONN SMRD CIRCUITRY BY IMADVERTENT VOLTAGE APPLICATION.	FAR 27-41002-897 47 ED4181TED 871CT	FAILURE.	FAR 27-04374-3 .TED.	RE INSTALLED AND PI	FAR 27-04374-8	GYROSCOPE EXHIBITE	PECTIVE NOVEIBER 10
TEST/REPORT HUMBER FAILED COMPONENT NAME	A-98-D4-3537F GYRO-RATE SHRD	ACTORY -HOTOR -HOTOR IN THE	H6-99-04-3489-F DISMLACEMENT GYAO E7-41002-897 NO	CAUSED	A-99-04-4008F FAR RATE GYRO ET- TOLERANCE. HIGH MALL VOLTAGE MAS INDICATED.	USE PADDING ON MORK BENCHES MHERE GYROG ARE INSTALLED AND PADDED INSERTS IN GYRO HINDLING CONTAIN	A-99-04-3580F RATE GYRO	FAILLME MODE-CONTANTHATION. DURING MANUFACTURING TESTS, THE GYROGCOPE EMIBITED A HIGH MULL OUTPUT VCLTAGE. SEVERE Corrosion was found on the Signal Generator Cap.	CORRECTIVE ACTION-THE VENDOR HAS TAKE CORRECTIVE ACTION, EPPECTIVE HOVEIBER 18, 1962, 100 PERCENT VISUAL EXAMINATIO 1 OF THE SIGNAL GENERATOR FOR CONTAMINATION WAS INSTITUTED. REF-REPORT JRS-1042-1 DATED OCTOBER 1962.
ATATER AGE-ATATER	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	FAILURE MODE-OUT OF TOLERANCE, DURING :: F. E. REPORTED FAILURE WAS COMFIRMED. THE SPIN MAS A PARTIALLY DEMACHETIZED SAND MACHET. CORRECTIVE ACTION-TWX SOM-SOF 107-116 DATE INDICATING DAMAGE THAY CAN BE INTRODUCED	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	136	AUTOFILOT-SQUARE-A/B FYRO PACKAGE FAILURE HODE-OUT OF TOLE	CORRECTIVE ACTION-USE PA	AUTOFILOT - SQUARE - A/B GYRO PACKAGE	FAILURE HODE-CONTANTHATI CORROSION MAS FOUND ON TH	CORRECTIVE ACTION-THE VENDOR IN OF THE BIGMAL GENERATOR FOR

GENERAL DYMANICS CONVAIR DIVISION

0 14	16030	COMP 1 FOR WAS N	ETNEL 097227	**************************************	C. C. OIT NO-60 1 AEE IN TH
PRI VENDOR NAME OTH VENDOR PART NO		IS ETHIBITING A SIS ETHIBITING A SIS ETHIBITING A SIS ETHIBITING A SIS ETHIBITING WAS MICHIGH.	YES HIMM. HOMETMEL NO. L. JRS101AZ	YES 60/C	TES CD/C MO 8854-BK-1C. TES KEARFOIT MO TOM (SHRD) NO EAD BREARAGE
11 ME 01 F	ETA VES	R AMPLIFICAL RANSISTOR. INITIATE A P.	FACTORY YES	FACTIONY VES	PACTORY YES OCD. 27-2885 PACTORY YES 10M-DETECTOR 10 PLENLEAG
VEHICLE DATE DIF	621006	FOUND TO BE HE TRANSISTO ELING IN A T GN GROUP TO EEMING TRANS	e 00129	90	GEIDOA GEIDOA WOTCA ROTAT
DIF DATA SOURCE PART NUMBER	7AR 87-41008-895	HAL AMPLIFIER WAS TONE ON MORE OF THE IN CHANGE IS CHANNE THE AUTOPILOT DESTI SINED THAT THE SCRI	FAR E7-04514-3 [E51.	FAR 27-41002-895 90 NO-60 815MAL.	FAR E7-4100E-887 FAR E7-4100E-838 E7-4100E-838 E7-4100E-838 E7-4100E-838 E7-4100E-838
TEST/REPORT NUMBER FAILED COMPONENT NAME	A-98-D4-USSOF AMPLIFIER-TRANSISTOR.	FAILURE MODE-OUT OF TOLERANCE, THE GAIN OF THE VAN-RATE BIGNAL AMPLIFIER WAS FOUND TO BE LOW. THE FAILURE WAS COMPT RMED. THE LOW GAIN OF THE YAW SIGNAL AMPLIFIER WAS CAUSED BY ONE OF MORE OF THE TRANSISTOR AMPLIFIERS EXHIBITING A B AIN CHANGE AFTER CALIBRATION. THE PROBABLE CAUSE FOR THE GAIN CHANGE IS CHANGELING IN A TRANSISTOR. CORRECTIVE ACTION-RAR A-89-04-3622 WAS WRITTEN REQUESTING THE AUTOPILOT DESIGN GROUP TO INITIATE A REQUEREMENT FOR SCREEN HE TRANSISTORS FOR CHANMELING WAS N OT ECONOMICALLY FEASIBLE CONSIDER; NG THE FEW INSTANCES (S) WHICH HAVE BEEN REPORTED. NO CORRECTIVE ACTION.	FAR RATE 6:NO SHED ET-	CORRECTIVE ACTION-MOME. FAILURE NOT COMFIRMED. TOPILOT-SQUARE-A/B A-99-34-4214C RO PACKAGE EP-41002-895 FAILURE MODE-OUT OF TOLERANCE. GYRO CAN MAS REJECTED FOR SMSD NO-60 BISHAL.	UNDOFILOT-SAUARE-A'B HG-99-04-3506-F ET-4100E-897 GE1004 FACTORY YES GO/C FAILURE MODE-EARATIC OPERATION, SHED LAMP EXTINGUISMED S TO 4 HIMUTES DURING CHECK TO PROCD. 27-29854-BK-1C. CORRECTIVE ACTION-MONE, FAILURE NOT CONFINED. UTOPILOT-SAUARE-A/B A-B8-04-3566F FAILURE INDICATION WAS A SPIN-MOTCA ROTATION-DETECTOR (SHRD) NO-60 I PAILURE MODE-ELECTRICAL OPEN, IN EACH CASE THE FAILURE INDICATION WAS A SPIN-MOTCA ROTATION-DETECTOR (SHRD) NO-60 I PAGE OSSI
BYBIEN BUB-BYBIEN	AUTOFILOT- SQUARE-A/B	FAILURE MODE-OUT OF TOLE RHED. THE LOW GAIN OF THE AIM CHANGE AFTER CALIBRAY CORRECTIVE ACTION-RAR ASCREENING TRANSISTORS TO OT ECOMOMICALLY FEASIBLE	AUTOFILOT-SQUARE-A/B GTRO PACKAGE FAILURE WODE-OUT OF TOLE	CORRECTIVE ACTION-MOME. AUTOFILOT-SQUARE-A/B FAILURE MODE-CUT OF TOLE	AUTOPILOTE MUTICIFIED METATION SHED LAND EXTENDED AUTOPILOTE MODE-ERRATIC OPERATION, SHED LAND EXTENDED AUTOPILOTE MODE CONFIRMED. CORRECTIVE ACTION-WOME, FAILURE NOT CONFIRMED. AUTOPILOTE MODE-ELECTRICAL OPEN, IN EACH CASE THE PRICATION. (6780 PACAAGES 8/M 108-0128; ROS-028

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STRTEM BUS-STRTEM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE BITE PRI	PRI VENDOR MANE OTH VENDOR PART NO	
ROLL GYROS.		Management of the Community of the Commu			20044
CORRECTIVE ACTION-AM INPA AIRED GYROS THAT MUSTBE DI INCORPORATED INTO APPLICA LEALEAD BREAKAGE.	CORRECTIVE ACTION-AM IMPROVED FLEXLEAD DESIGN WILL BE INCORPORATED AS SOCM AS FOSSIBLE OM ALL NEW GYROS ANG ALL REP AIRED GYROS THAT MUSTBE DISASSIMDLED TO A LEVEL THAT EXPOSES FLEXLEAGASSENDLIES. NEW HANDLING REGUIREMITS HAVE BEEN INCORPORATED INTO APPLICABLE LYRO PROCEDURES. BAFFLES ARE BEING INCORPORATED INTO GYROS NEAR FLEXLEADS TO PREVENT F LEXLEAD BREARAGE.	CRATED AS SOCH AB PREEKE AGASSEMBLIES ING THEORPORATED IN	COSSIBLE ON ALL NE . NEW HANDLING REG NO GYROS NEAR FLE	FOROS ANG ALL REF UIREWENTS HAVE BEEN KLEAUS TO PREVENT F	
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-88-04-35R9 GTRO-RATE	FAR E7-04574-3	621002 FACTORY	VES MINNEARCAIS-NO NO MEYMELL JRS 101AE	4117
FAILURE WODE-ELECTRICAL C FAILURE 13 ATTRIBUTED TO 3 DUGING ASSEMBLY THE REPAI WLD MOT BE IDENTIFIED.	FAILURE WODE-ELECTRICAL OPEN-TERHINAL 6 WAS BROKEN OFF AS IT WAS TOUCHED WITH A SOLDERING IRON. THE RATE GYROSCOPE FAILURE IS ATTRIBUTED TO SOLDER TERKINAL 6 BEING BROKEN AND SOLDERED TOGETHER. WHEN HEAT WAS APPLIED TO THE TERMINAL DURING ASSENBLY THE REPAIRED TERMINAL FELL APART. THE PERSONSIBLE FOR BREAKING AND SOLDERING THE TERMINAL COULD NOT BE IDENTIFIED.	MAS TOUCHED WITH A	, SOLDERING IRON. HEN HEAT WAS APPLICAKING AND SOLDER	THE RATE CYROSCOFE IED TO THE TERMINAL ING THE TERMINAL CO	
CORRECTIVE ACTION-THE VENDOR AND 6D/ THEY WERE ALSO REQUESTED TO MAINTAI THIS FAILURE, (REY-RAR A-89-04-3617).	CORRECTIVE ACTION-THE VENDOR AND 6D/C PERSONNEL MHO HANDLE THE RATE GYRODCOME MIRE INFORMED OF THE CAUSE OF FAILURE THEY HERE ALSO REQUESTED TO MAINTAIN A MORE VIGILANT HANDLING AND INSPECTION PROGRAM TO PREVENT ANY RECUPRENCE OF HIS FAILURE. (REF-RAR A-89-04-3817).	HE RATE GYRODCOPE N MG AND INSPECTION P	ERE INFORMED OF T ROGRAM TO PREVENT	ME CAUSE OF FAILURE ANY RECUPPENCE OF	
AUTOPILOT - SAUARE - A/B STRO PACKAGE	A-98-04-3331F GTKO-DISPLACEMENT THERMOSTAT	FAR 27-41002-895	SELDUE ETR	YES NO	
FAILURE HODE-CONTAHINATIC EMPERATURE SETTING, THE F TO EXCESSIVE CURRENT THRO TED BECAUSE TAPE ON THE IN	FAILURE HONE-CONTAHINATION. THE FITCH DISPLACEMENT COARSE HEATER THERMOSTAT CONTROL DID NOT CUT OUT AT THE CORRECT EMPERATOR SETTING. HE FAILURE MAS COMPIRMED, THE COARSE HEATER THERMOSTAT MALFUNCTIONED BECAUSE IT WAS PITTED DUE TO EXCESSIVE CURRENT THRONGH THE CONTACTS CALDED BY SHORTING AND DURNING OF THE HEATER BLANKET. THE BLANKET OVERHEAD BECAUSE TAPE ON THE INAIDE OF THE BLANKET CUT DOWN HEAT TRANSFER.	ATER THERMOSTAT CON ATER THERMOSTAT MAI AND DURNING OF THE RANSTER.	TROL DID NOT CUT . FUNCTIONED BECAUS . MEATER BLANKET.	NI AT THE CORRECT 1 IT WAS PITTED DUE THE BLANKET OVERHEA	
CORRECTIVE ACTION-RAIL A-98 ING CYCLE OF THE GYROSCOPE.	CORRECTIVE ACTION-RAILA-96-04-3693 WAS WRITTEN TO THE VENDOR REGUESTING THAT TAPE NOT BE USED BURING THE NAMIFACTUR NG CYCLE OF THE GYROSCOPE,	REQUESTING THAT TA	PE NOT BE USED DU	LING THE MANUFACTUR	
AUTOPILOT-SQUARE-A/B	A-OR-CA-3489-F AMPLIFIER-PITCH BIGNAL	FAR 27-410UR-655	RETOOS WALKER	22	****
FAILURE NODE-FAIL DURING .	FAILURE KODE-FAIL DURING OPERATION. THE GTRO PRG WAS IR/D WHEN THE ENGINES COULD NOT BE GIMBALED IN PITCH. FAILURE His traced to burned out bighal amplifier (27-41878-807). Burn out was caused by Hisapplication of extermal voltage	EN THE ENGINES COU.	D NOT BE GIMBALED MISAPPLICATION O	IN PITCH, FAILURE EXTERNAL WALTAGE.	
RECTIVE ACTION-NOME. B	CORRECTIVE ACTION-WOME. SOURCE OF EXTERNAL WOLTAGE NOT KNOWN.	nga ng garamaning nangan angah magahang dingga nga nga nga nga nga nga nga nga nga	ta papilan yidha gidhan dhansayanidasi oʻrtabasi	e caristi un a esta altri associare reconstitucioni del galeri estato.	-
- 40 to July Budge, andetsaffenyan , west contemporare	ementer eta en esta esta esta esta esta esta esta esta			39KO 39W	

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BY STER	FALLED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE BITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	A-00-04-3310-F AATE 67RO	FAR 27-04574-3	421000 FACTORY YES HINN, HONETWEL NO L. JRS	***************************************
FAILURE MODE-CONTANIMATIC LIC CONTANIMATION IN VIC	FAILUME MODE-CONTANIMATION. HIGH MULL OUTPUT VOLTAGE DURING TOP PKG MFG TEBT. CONFIRMED. CAUSE. IC CONTANIMATION IN VICINITY OF BIGHAL PICKOFF. PIECE OF WIRE BENT AT RIGHT ANGLE ON BUNFACE OF	6 TOP PKG MFG TEST.	MATIOM, HIGH MULL OUTPUT VOLTAGE DURING TOP PHG HFG TEBT, CONFIRMED, CAUSE OF FAILURE MAS METAL. VICINITY OF BIGHAL PICKOFF, PIECE OF WIRE BENT AT RIGHT ANGLE ON BUNFACE OF PICKOFF ROTOR SHAFT	
CORRECTIVE ACTION-VENDO	CR CHANGED INSPECTION, NFG TECHNIAM	S, AND PROCESS CONT	CORRECTIVE ACTION-VENDOR CHAMED INSPECTION; NºG TECHNIQUES, AND PROCESS CONTROL AS DOCUMENTED IN MINN, KONETMELL R PORT JRS-1042-1.	
AUTOFILOT - SQUARE-A/B	A-89-04-3515-F RATE 67RO	FAR R7-54874-9	RE1000 FACTORY YES MINN. MONETHEL. NO L. JRS101A2	32.23
FAILURE HODE-OUT OF TOLERA E NOT DETERMINED. PROBABLE	LERANCE, HIGH OUTPUT NULL VOLTAGE DE BLE SHOCK DANAGE DURING HANDLING.	RING TOP PICE NES TE	TOLERANCE. HIGH OUTPUT NULL VOLINGE DURING TOP PKG HEG TEST. FAILURE COPTRHED. CAUSE OF FAILUR BABLE SHOCK DAMGE DURING HANDLING.	
CCRRECTIVE ACTION-RAR A	A-99-04-3610 ISSUED. MPS E1.36.5 REVISED ON HANDLING PROCEDURES.	119ED ON HANDLING PR	occoures.	1
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-3514-F RATE GYRO	FAR E7-04574-3	RE1000 FACTORY YES HIMM. HOMEVMEL NO L JASS101A2	
FAILURE HODE-OUT OF TOL	TOLERANCE, HIGH OUTPUT VOLTAGE BURING HIGH SHOCK INPUT DURING NEG. PROCESS.	TOP PICE TEST. CONFE	TOLERANCE, HIGH OUTPUT VOLTAGE DURING TOP PKG TEST, CONFIRMED, DUE TO DISTORTED AUADRILEVER RES High shock input during NFG, PROCESS,	
CORRECTIVE ACTION-RAR /	CORRECTIVE ACTION-RAR A-99-0361D 189UED, MP3 21.36.5 RE HAIR TO PROYECT GTRO ASSY DUILNE FACTORY HANDLING.	13ED TO INCLUDE USE	CORRECTIVE ACTION-RAR A-99-04-3810 188UED, MPS 21.38.5 REVISED TO INCLUDE USE OF INSERT CATALYST FOAM OR RUBBERIZED HAIR TO PROTECT GTRO ASSY DUI ING FACTORY HANDLING.	
AUTOFILOT - SQUARE-A/B STRO PACKAGE	A-91-04-3513-F RATE 5780	FAR 87-04374-3	621000 FACTORY YES HINN. HONEYMEL NO LINN. HONEYMEL	4 cm
FAILURE MODE-OUT OF TO DRILEVER RESULTING FROM	TOLERANCE, HIGH OUTPUT MULL VOLTAGE DURING TOP PR.	URING TOP PKG TEST. FG. PROCESS.	TOLERANCE, HIGH OUTPUT NALL WOLTAGE DURING TOP PRG TEST. CONTRNED, ATTRIBUTED TO DISTORTED QUA YON FROSABLE HIGH SHOCK INPUT DURING HEG, PROCESS.	
CORRECTIVE ACTION-RAR A	CORRECTIVE ACTION-RAR A-99-Dis-4410 [550ED, Nº8 21.38.5 RE Mair to profect gyro during factory Handling.	VISED TO INCLUDE UN	14# A-99-Di-J4%10 SESUED, MPS EL.58.5 REVISED TO INCLUDE USE OF INSERT CATALYST FOAM OR RUBBERIZED to DURING FACTORY HANDLING.	
			SASE 0384	

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TO WEST STATES OF THE TAIL OF THE WASTERN THE TAIL OF THE CANISTER WAS MOUNTED TO BE TAILOR OF THE TAILOR OF THE TAILOR OF THE CANISTER WAS MOUNTED TO BE STRONG THE CANISTER WAS MOUNTED TO A SUMMED AND UND WASTER TAILOR OF WALNESS AND THE CANISTER WAS MOUNTED TO BE STRONG THE CANISTE OF TAILOR THE CANISTER WAS MOUNTED TO BE STRONG THE CANISTER WAS MOUNTED TO BE STRONG THE CANISTER WAS MOUNTED TO BE STRONG THE CANISTER WAS MOUNTED THE CANISTER WAS MOUNTED THE CANISTER WAS MOUNTED THE CANISTER WAS MOUNTED AND THE CANISTER WAS MOUNTED AND THE CANISTER WAS MOUNTED AND THE CANISTER WAS MOUNTED THE CANISTER WAS MOUNTED TO THE CANISTER WAS MOUNTED THE TAILOR TO THE CANISTER WAS MOUNTED TO THE CANISTER WAS MOUNTED WAS TAILOR TO THE CANISTER WAS MOUNTED AND THE TAILOR WAS MOUNTED AND THE CANISTER WAS MOUNTED AND THE CANISTER WAS MOUNTED WAS TAILOR WAS MOUNTED AND THE CANISTER WAS MOUNTED WAS TAILOR WAS MOUNTED AND THE CANISTER WAS MOUNTED WAS TAILOR WAS MOUNTED WAS TAILOR WAS MOUNTED AND THE CANISTE THE CANIST								
He-89-GA-3470-F HE-89-GA-348-F HE-89-GA-34	SUD-SYSTEM	FAILED CONFORENT NAME	7 ×	DATE DIF	11ME D1F	5	OR PART NO	
METAL THE CANTION-CTRO ME, WAS IND WHEN TEST HANKERS FROM THE CANTSTER WAS MOMERATED. CROSS COM- PRELECTION OF YOUTHER WAS HEARD IN THE CANTSTER. FAILURE ANALYSIS REVEALED A BURNED SHOD WIND PRELECTION OF YOUTHER WAS HEARD IN THE CANTSTER. FAILURE ANALYSIS REVEALED A BURNED SHOD WIND THAT THE COMMETCHES CANNOT BE INTERCHANNED. NO CORRECTIVE ACTION WAS TAKEN. A STORT ENTO A STORY REVEALED THAT SHOW WHEN DURING WANNEACTURING IT WAS HOTICED TO HAVE A MICH HAL. OF 193 CALL FOR HO MORE THAN ES NY. A TEARDOM MALLYSIS COMOCTED ON THE GIND REVEALED A BABLY DISTORTE B SUBFECTED THAT STORE THAN ES NY. A TEARDOM MALLYSIS COMOCTED ON THE GIND REVEALED A BABLY DISTORTE B SUBFECTED THAT AT SOME THE PRESENCE OF REDBERIZED HAIR WAS MOMERATED. A STORY REVEALED THAT AT SOME THE GIND WAS THE OWN OF REVEALED A BABLY DISTORTE B SUBFECTED THAT AT SOME THE GIND WAS THEN HAS WORD A SECRETER 1862. A STORY OF SECRETARIES OF NUBBERIZED HAIR WAS MODE A SECRETER 1862. A STORY OF SECRETARIES OF NUBBERIZED HAIR WAS MODE A SECRETER 1862. A STORY OF SECRETARIES OF ON HAIR HAS MODE A SECRETER 1862. A STORY OF SECRETARIES OF ON HAIR WAS A WERE THITAL ELECTRICAL TEST CONTINCE THE FALLURE. A TEAL OF THE SHORY OF SECRETARIES OF THE FALLURE AND SECRETARIES OF THE FALLURE. A STORY OF SECRETARIES OF OUR SECRETARIES OF THE SOME THE FALLURE. A TEAL OUT OF THE STORY	AUTOFILOT-SQUARE-A/B GTRO PACKAGE	HG-09-04-3470-F 67RO-3MRD	FAR 27-41002-897	621000	ETR			1877
THAT THE COMECTORS CANNOT BE INTERCHANGED, NO CORRECTIVE ACTION WAS TAKEN. A-89-04-3483-F RATE GING A-99-04-3483-F RATE GING A-99-04-3483-F RATE GING A 3100Y REVEALED THAT GING ARE UNFACEDRING IT WAS NOTICED TO HAVE A HIGH HALL OF 193 CALL FOR NO MAS DROPPED. A 3100Y REVEALED THAT GING ARE UNFACED AND ASSENDED INTO MENT ASSENDED ON THE GING REVEALED A BADLY DISTORTE A SECRETARY AT SOME THAN ES MY. A TEAMOOM AMALYSIS CONDUCTED ON THE GING REVEALED A BADLY DISTORTE A SECRETARY AT SOME THAN ES MY. A TEAMOOM AMALYSIS CONDUCTED ON THE GING REVEALED A BADLY DISTORTE A STORY THAN SOME THAN ES MY. A TEAMOOM AMALYSIS CONDUCTED ON THE GING REVEALED A BADLY DISTORTE A STORY THAN WERE THAN ES MY. A TEAMOOM AMALYSIS CONDUCTED ON THE GING REVEALED A BADLY DISTORTE A STORY TES HORETHELE OF A MARD WEREINE SUMFA. A-99-04-348-F RECTELERATION. THE RATE GING MAS IRVD FOR A HIGH MALL OUTPUT VOLTAGE OF 10T MY. SPECIFICATIONS AND SECRETICAL TESTS CONTINGED THY SECRETICAL TESTS CONTINGED THE FAILURE. A TEAMOOTHER OF STORY TES HORETHELE. A TEAMOOTHER OF STORY TES HORETHELE. A TEAMOOTHER THAN A STORY TEST CONTINGED THE FAILURE. A TEAMOOTHER OF STORY TEST CONTINGED THE FAILURE WAS NOT CONFIDENCE. A SEASON OF STORY OF STORY TESTS CONTINGED THE FAILURE WAS NOT CONFIDENCE. A SEASON OF STORY OF STORY TESTS CONTINGED THE FAILURE WAS NOT CONFIDENCE. THE FAILURE WAS NOT CONFIDENCE. THE FAILURE WAS NOT CONFIDENCE. HOWER, THE FAILURE WAS NOT COMPINED.	FAILURE MODE-FAIL DURIN MECTED AT THE TEST SET. ING. CAUSED BY MISAPPLIC	WE OPERATION-GYRO PKG. WAS IR/D WHE A LOUD BUZZING NOISE WAS HEARD IN CATION OF VOLTAGE ON THE SHRD CIRCL	EN TEST MARNESS FROM THE CANISTER. FAILUR	THE CANISTI E ANALYSIS	IR MAS HO Revealed	MENTARILY A BURNED	CROSS CON	
A-99-04-3483-F RATE GYRO A199-04-3483-F RATE GYRO A210-04-3483-F RATE GYRO A210-04-3483-F RATE GYRO A210-04-3484-F A220-04-3484-F RATE GYRO A2100Y REVEALED THAT GYROS ARE UMSACKED AND A3SENGLED INTO NEXT A3SENGLES ON HAND WORKING SURFA WAS E1.38-5 RECOMEDING THE UNE OF RUBBERIZED HAIR WAS MUDE 4 DECENDER 1962- A2100Y REVEALED THAT GYROS ARE UMSACKED AND A3SENGLED INTO NEXT A3SENGLES ON HAND WORKING SURFA WAS E1.38-5 RECOMEDING THE UNE OF RUBBERIZED HAIR WAS MUDE 4 DECENDER 1962- A 2100Y REVEALED THAT GYROS ARE UMSACKED AND A3SENGLED INTO NEXT A3SENGLES ON HAND WORKING SURFA WAS 23 V.S. OF RECOMEDING THE UNE OF RUBBERIZED HAIR WALL OUTPUT VOLTAGE OF 107 MV. SPECIFICATIONS WAS 23 V.S. OF OWER STRUNKED TO VENCOR WHERE INITIAL ELECTRICAL TESTS CONTINUED THE FAILURE. A TEALURE A-09-04-3483-F RAND OCTOSER 1962- A-09-04-3484-F RAND OCTOSER 1962- A-09-04-3484-F RAND OCTOSER 1962- A-09-04-3484-F RAND OCTOSER 1962- A-09-04-3484-F RAND OCTOSER 19	CORRECTIVE ACTION-BING	E THE PARTIAL HISHATING OF THE TEST THE TOWNER BE INTERCH	T SET CONNECTORS WAS ANGED, NO CORRECTIVE	ACCIDENTIAL ACTION WAS	L. AND TH TAKEN.	F COMECI	TORS ARE MA	
CALL FOR NO WERE THAN 25 NV. A TEARDOAN ANALYSIS CONDUCTED ON THE GIRO REVEALED A BADLY DISTORTE B SUSPECTED THAT AT SOME THAN 25 NV. A TEARDOAN ANALYSIS CONDUCTED ON THE GIRO REVEALED A BADLY DISTORTE A STUDY REVEALED THAT GIROS ARE UMBACKED AND ASSENDED INTO NEXT ASSENDLIES ON HAND WORKING SURFA A STUDY REVEALED THAT GIROS ARE UMBACKED AND ASSENDED INTO NEXT ASSENDLIES ON HAND WORKING SURFA A 590-04-3486-F A 790-04-3486-F A 790-04-3481-F A 700-04-3481-F A 700-04-3481-	AUTOFILOT-SAUARE-A/B	A-99-04-3485-F RATE GYRO	FAR 27-04574-3	621000	FACTORY	YES HOM	EYHELE LDSAR	692791
A STUDY REVEALED THAT GYROS ARE UNFACKED AND ASSEMBLED INTO MEXT ASSEMBLIES ON HARD MORKING SURFA A-99-04-3486-F RATE GYRO A-99-04-3486-F RATE GYRO A-99-04-3486-F RATE GYRO AND STATE	FAILURE MODE-STRUCTURAL MV. SPECIFICATIONS CALL D GUADRILEVER. 17 18 SU	L. THE RATE GYRO WAS IR/D WHEN DUR L FOR NO MORE THAN 25 MY. A TEARDO SPECTED THAT AT SOME TIME THIS GYR	ING HANUFACTURING IT EN ANALYSIS COMDUCTED O MAS DROPPED.	WAS NOTICE	D TO HAVE	E A HICH L	HULL OF 193	
A-99-04-3486-F A-99-04-3486-F A-99-04-3486-F A-99-04-3486-F BY-04301-1 BY	CORRECTIVE ACTION-A ST	UDY REVEALED THAT GYROS ARE UNFACK E1.36.5 RECOMMENDING THE USE OF RU	ED AND ASSEMBLED INTO BBERIZED HAIR WAS MAC	NEXT ASSE	HBLIES CI ER 1962.	N HARD WO	RKING SURFA	
F SPECIFICATION, THE RATE GYRO WAS TRYD FOR A HIGH MULL OUTPUT VOLTAGE OF 10T MY. SPECIFICATIONS AN 23 MY. GYRO WAS RETURNED TO VENCAR WHERE INITIAL ELECTRICAL TESTS COMFIRMED THE FAILURE. A TEA UCTED ON THE GYRO REVEALED NO DISCREPANCIES. E-1 DATED OCTOBER 1962. A-99-04-3491-F GYRO-DISPLACEMENT A-99-04-3491-F GYRO-DISPLACEMENT E-1 DATED OCTOBER 1962. A-99-04-3491-F GYRO-BATION, GYRO-SAIN 4047ABE: 4213ABDE: 4202, 3983425, REPORTEDLY FAILED DURING MANUFACTUR SHOWED SIGNS OF STICTION.	AUTOF11.0T-SQUARE-A/B	A-99-04-3486-F RATE CYRO	FAR R7-04301-1	621000	FACTORY		114 114	892792
VENDOR HAS MADE SHEEFING CHANGES IN MANUFACTURING AND QUALITY CONTROL TECHNIQUES. REF. HINNEAPOLI A-99-04-3491-F A-99-04-3491-F GYRO-DISPLACEMENT BT-04250-B BURING OPERATION, GYROS S/N 4047ABE, 4213ABDE, 4202, 3983425, REPORTEDLY FAILED DURING HANUFACTUR SHOMED SIGNS OF STICTION. HOME. THE FAILURE WAS NOT CONFIRMED.	FAILURE MODE-OUT OF BP CALL FOR HO MORE THAN 2 RDOWN ANALYSIS CONDUCTE	ECIFICATION, THE RATE GYRO WAB IR/ 25 HV. GYRO WAS RETURNED TO VENECH 20 ON THE GYRO REVEALED NO DISCREPA	D FOR A HIGH MULL OU WERE INITIAL ELECTRINCIES.	PUT VOLTA(ICAL TESTS	E OF 107 CONFIRME	. KV. SPEC D THE FAI	ĕ ∢	
A-99-04-3491-F GYRO-DISPLACEMENT ET-04250-3 DURING OPERATION, GYROS SZN 4047ABE, 4215ABDE, 4202, 398342E, REPORTEDLY FAILED DURING WANNFACTUR SHOWED SIGHS OF STICTION. HOME. THE FAILURE WAS NOT CONFIRMED.	CORRECTIVE ACTION-VEND 8-WONEYMELL JRB-1062-1	OR HAS MADE SMEEPING CHANGES IN MUDATED OCTOBER 1962.	INUFACTURING AND QUAL	ITY CONTROL	. TECHNIG	IVES. REF.	HINEAPOLI	
HODE-FAIL DURING OPERATION, GYROS S/N 4047ABE; 4213ABDE, 4202, 398342E, REPORTEDLY FAILED DURING M WHEN THEY SHOKED SIGHS OF STICTION. VE ACTION-WOME. THE FAILURE MAS NOT CONFIRMED.	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-3491-F GYRO-DISPLACEMENT	FAR 27-04250-3	621000	FACTORI	¥ 5	ARFOTT 0-2506-000	4884
LURE WAS NOT CONFIRMED.	FAILURE MODE-FAIL DURI	ING OPERATION, GYROS S/N 4047ABE; .	AEISABOE, AEGE, BSBSA	ee, report	EDLY FAII	LED OURTH	G MANUFACTU	<u> </u>
PAGE 0394	CORRECTIVE ACTION-NOW	E. THE FAILURE WAS NOT CONFIRMED.						
			·				PAGE 039	1-

SENERAL DYNAMICS CONVAIR DIVISION

11 JUN 1966

AUTOPILOT-SQUARE-A/B GTRO PACKAGE	PAILED COMPONENT NAME	DIF DATA BOURCE	DATE DIF TIME DIF OTH VENDOR PART NO	DIF OTH VE	ENDOR PART NO	
	A-SH-D4-3360F DISPLACEMENT SYRO MOTOR	FAR 27-41002-855	82028 AAF	YES RE	YES KEARFOTT NO	
FAILURE MODE-STRUCTURAL NY BEARING LUBRICANT DRY	FAILURE MODE-STRUCTURAL, A NO-60 MAS REPORTED FROM THE SPIN-MOTOR ROTATION-DETECTOR (SMRD) CIRCUIT, FAILURE CAUSED BY BEARING LUBRICANT DRYING IN THE SPIN-MOTOR BEARING CAUSING EXCESSIVE FRICTION THEREBY SLOWING THE SPIN MOTOR	FIN-MOTOR ROTATION-DE	FECTOR (SMRD) CI	RCUIT. FAI	LURE CAUSED N MOTOR.	
CCRRECTIVE ACTION-A CON- OR RELIABLLITY PROGRAM PI RICANT IS UNDER NAT.	CORRECTIVE ACTION-A CONTINUING STUDY OF THE SPIN-MOTOR BEARING PROBLEM IS BEING CONDUCTED BY KEARFOTT. REF-SPIN MOT OR RELIABILITY PROGRAM PROGRESS REPORT KDR-10-82-1, SEPT. 1 THROUGH BEPT. 30, 1982. THE TESTING OF A NEW TYPE OF LUB RICANT IS UNDER NAY.	EARING PROBLEM IS BEIL 1 THROUGH BEPT. 50,	46 COMDUCTED BY 1862. THE TERT!	KEARFOTT.	REF-SPIN HOT TYPE OF LUB	
AUTOFILOT-SQUARE-A/B	A-99-04-3536F GYRO-DISPLACENENT SARID	FAR 7-04230-3	620928 FACTORY	7 T. O.	KEARFOTT C70-2506-000	*****
FAILURE MODE-OUT OF TOLI ED. THE GVRO CPERATED NOT TEST SET DISCREPANCIES.	FAILURE MODE-OUT OF TOLERANCE. DURING PACTORY TESTS THE SYRO REMONTEDLY FAILED TO MULL. THE FAILURE MAS MOT COMFIRM ED. THE GYRO CPERATED HORMALLY DURING ALL FAILURE ANALYSIS TESTS. A REVIEW OF FACTORY RECORDS FAILED TO INDICATE ANY TEST SET DISCREPANCIES.	syro reportedly failes b tests. A review of i	TO MULL, THE PACTORY RECORDS	FAILED TO	NOT CONFIRM INDICATE ANY	
CORRECTIVE ACTION-UNKNOWN.	İ					
AUTOFILOT-SQUARE-A/B	HG-98-04-3432-F 6780	FAR E7-41002-897	620926 FACTORY	ž Š	5/Q3	:
FAILURE MODE-OUT OF TOLI PRODUCED HIGHER VALUES RIGIMAL FACTORY TEST SET PLY.	FAILURE MODE-OUT OF TOLERANCE, THE GYRO PACKAGE WAS REPORTED OUT OF TOLERANCE WHEN THE THREE VOLT ROLL SLAVING TEST PRODUCED HIGHER VALUES THAN ALLOMABLE, FAILURE NOT CONTIRED USING LABORATORY TEST SET, BUT WAS REPEATED WHEN THE O RIGINAL FACTORY TEST BET WAS USED. SUBMECT INSUFFICIENT WARM-UP TIKE AND IMPROPER SETTING OF 115 VAC 400HZ POWER SUP.	RTED OUT OF TOLERANCE RRED USING LABORATORY ARH-UP TIME AND IMPRO	WHEN THE THREE TEST SET, BUT VER SETTING OF 1	VOLT ROLL MS REPEATE 13 VAC 400	SLAVING TEST D WHEN THE O HZ POWER SUP	
CORRECTIVE ACTION-REPORT	REPORTED PAILURE NOT IBOLATED. NO ACTION TAKEN.	ON TAKEN.				
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	HG-98-34-3429-F ROLL RATE 6YRO	FAR E7-41002-887	SEUSES FACTORY	9 9	3/ 9	:
FAILURE MODE-OUT OF TOLI	' TOLERANCE, HOLL RATE GYRO REPORTED OUT OF TOLERANCE. THE PROBLEM WAS TRACED TO THE TEST BET.	UT OF TOLERANCE. THE	MOBLEH MAS TRAC	ED 10 THE	76.b.T 86.f.	
CORRECTIVE ACTION-HOME.						
			dang manatur malap adalah dari da da da da da da da da da da da da da			
					PA6E 0395	-

GENERAL DYNAMICS CONVAIR DIVIBION

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STSTEN BUB-STSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	11 M 014	PRI VENDOR NAME OTH VENDOR PART NO	NAME PART NO	
AUTOPILOT-SQUARE-A/B SYRO PACKAGE	Ax62-DD47/AR141-Q-1-161/FC-CO-D1-D COMPOSIYE-FACTORY D13-D03 AMPLIFIER	COMPOSITE-PACTORY	620029 0191	PACTORY	04 04 04		
FAILURE HODE-FAIL BURING	DURING OPERATION-UMERPECTED ENGINE TORBUING MOVEMENTS MERE APPARENT DURING PITCH GYRO BIAS FUNCTI SSE PITCH GYRO MULLING AMPLIFIER.	46 HOVEHENTS WERE A	PPARENT DU	A1146 P110	H 6780 BIAS	Fuec 11	
SYSTEM EFFECT-ERRATIC OPERATION,	ERATION,						
WEHICLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE RETEST MAS REQUIRED.	REGULAED.				-	
CORRECTIVE ACTION-THE FA	THE FAULT 6SE MULING ANTIFIER HAS REPLACED.	KCED.					
AUTOFILOT-SQUARE-A/B	A-83-04-3485-F Rate 5780	FAR 27-04574-3	\$2035	FACTORY	YES HONEYNELL ND	נָר	**************************************
FAILURE MODE-FAIL DURING 8 CAUSED BY A POORLY-FITT E GREATICALY.	FAILURE MODE-FAIL DURING CPERATION. THE RATE GYRO WAS IR/D WHEN IT WAS DISCOVERED THAT IT HAD NO CUTPUT. FAILURE MA 8 CAUSED SY A POCRLY-FITTED SPIN-WOTCH ROTATION-DETECTOR SLUG BECONING DISLOGGED AND CAUSING THE GYROSCOPE TO OPERAT E GRATICALLY.	HEN IT WAS DISCOVED BECOMING DISLODGED	NED THAT I	T HAD NO 1NG THE 6	OUTPUT. FAI	LURE 14	
CORRECTIVE ACTION-WENDOR	COMPECTIVE ACTION-WENDOR TO INFROVE BUMLITY CONTROL PROCEDURES.	£8.					
AUTOPILOT-SQUARE-A/B	HC-98-04-3408F ROLL RATE GYRO	FAR £7-41002-887	62 0922	ETR	YES NO		007235
FAILURE MODE-OUT OF SPEC ABORT, WAS FOUND TO BE W TO BOTH THE RI AND RE OVE	OF SPECIFICATION OR TOLERANCE, THE TURNING RATE IN THE REDUNDANT ROLL CHANNEL REQUIRED TO CAUSE AN TO BE MOSE THAN S PERCENT BELOW HOMINAL, ANALYSIS INDICATED THE RI GYRO WAS INADVERTENTLY MARRIED) RE OVERRATE DETECTORS.	RATE IN THE REDUKO. ALYBIB INDICATED TI	MT ROLL C	HANNEL RE MAS INAD	AUIRED TO C	AUSE AN	
CORRECTIVE ACTION-PROCED 85, WAS MODIFIED BY CICKE LATCHES.	PROCEDURE 27-91945BK1 WAS HODIFIED BY ECN TO CHANGE HARRIAGE PROCEDURE. THE GYRO TEST SET, TET SO Ciceeist to add a lisht around the special marber i relay to inform the operator when the relay	TO CHANGE MARRIAGE	PROCEDURE 3 INFORM T	THE 6YR	OR WHEN THE	TET 30 RELAY	
AUTOFILOT-SQUARE-A/B	A-90-G4-3456-F Amplifier Package	7. A. S.	226029	Ę	7E\$ 60/C 10		*****
FAILURE MODE-OUT OF TOLERANCE. FFIER TCTC-1, CHAMGED VALUE DUE	TOLERANCE. GYRO FACKAGE FAILED WHEN RESISTONS R-6 AND R-14, OF THE HEATER CONTROL MASHETTE AMPL. ID VALUE DUE TO AGING. THESE RESISTONS ARE THE DEPOSITED CARBON TYPE.	ISTONS R-6 AND R-14 I THE DEPOSITED CARI	OF THE N	EATER CO	TROL MASHET	16 AMPL	
CORRECTIVE ACTION-SOLC R	CORRECTIVE ACTION-6D/C RECOMMENDED USE OF METALLIC PILM REBIBTORB. VENDOR COMPLIED EFFECTIVE 4 MIRCH 1965	ISTORS. VENDOR CONP.	TED EFFEC	11 VE 4 H	.RCH 1963.		
egger een skalant skalantaappijoks s. e-s-oossessemmele salan genetaenee	те дей придавления по сей дем придава се се се се се се се се се се се се се				3	PA4E 0394	

SENERAL DYNAHICS CONVAIR DIVISION

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13 JUN 1968	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBORI	¥					
87.87EN 8.00-2737EN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	817E ME D1F	PRI VENDOR NAME OTH VENDOR PART NO	ART NO		
AUTOFILOT - SQUARE - A/B GYNO PACKASE	F-80-04-40-04-97	FAR E7-4100E-887	SECORE ETR		NO 60/C		***************************************	
FAILURE MOLL-OUT OF TOLERANCE, OUT OF TO OPERATION OF THE 67RO TEST BET TET 3085.	TOLERANCE. OUT OF TOLERANCE CONDITION REPORTED IN THE ROLL CHAMMEL. FAILURE TRACED TO ERROR IN to test set tet 3045.	EPORTED IN THE ROLL	CHAMMEL. FAI	LURE TR	ACED TO ERR	ž .		
COMRECTIVE ACTION-TET 30	TET SOAS ULB MODIFIED TO PREVENT RECURRENCE OF EARCH.	CE OF ERROR.						
AUTOFILOT-SQUARE-A/B	H6-99-04-3409F RATE 67RO	FAN 27-41703-809	1130 FAC	FACTORY	YES HONEYMELL NO	<u> </u>	*****	
FAILURE MODE-CONTANIMATI AILURE WAS ATTRIBUTED TO COUCED DURING 67RO MANUFU	FAILURE WOSE-CONTANIMATION. ROLL": ABORT VOLTAGE LEVEL VARIED MHEN NO CHANGE IN ABORT VOLTAGE LEVEL MAS MADE. THE F AILURE WAS ATTRIBUTED TO STICTION IN THE RATE GTRO CAUSED BY A BMALL PARTICLE OF SOLDER LIKE MATERIAL WHICH WAS INTR COUCED DURING GTRO MANUFACTURING BY THE VENDOR.	ED WEN NO CHANGE IN A SMALL PARTICLE OF	A ABORT WOLTA	GE LEVE MATERI	L MAS MADE.	THE F		
CORRECTIVE ACTION-THE 67 EXAMINATION OF INTERNAL 1	CORRECTIVE ACTION-THE 67RO VENDOR ININKEAPOLIS- HONEYNELL) REVISED MANUFACTURING PROCEDURES TO INCLUDE MICROSCOPIC EXAMINATION OF INTERMAL PARTS AND REVISED BOLDERING TECHNIQUES. REFERENCE HONEYNELL REPORT JRS-1062-1, DATED OCTOBER 1 1962.	REVISED MAMUFACTURII ES. REFERENCE MOMEN	46 PROCEDURES	TO INC	LUDE MICROS	COPIC		
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	HG-99-D4-3410F RATE 67RO	FAR 27-41002-097	1130 FAC	FACTORY NO	0.0		*******	
FAILURE MODE-OUT OF SPEC GE LEVEL MAS MADE, FAILUR	F SPECIFICATION OR TOLERANCE, ROLL-1 ABORT VOLTAGE LEVEL VARIED WHEN NO CHANGE IN THE ABORT VOLTA FAILURE AMALYSIS SHOKED FAILURE WAS CAUSED BY REMOTE RATE GYRO UNIT PART MUMBER E7-41703-80%.	T VOLTAGE LEVEL VAR! D BY REMOTE RATE GY!	ED SHEN NO C	HANGE E	H THE ABORT			
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-MOME. PAILURE DISCOVERED IN REMOTE RATE GYROSCOPE GROUP. REFERENCE FAR MUMBER	YROSCOPE GROUP. REFI	CREMEE FAR M	HBER HG	H6-99-04-3409 F.			
AUTOFILOT - SQUARE - A/B GYRO PACKAGE	A-99-04-3588F RATE 6VRO	FAR 27-04574-3	\$20920 FAC	FACTORY Y	YES MINNEAPOLIS-HO NO METMELL JRS101AE		06094	
FAILURE MODE-OUT OF TOLE HE PAILURE INDICATION HAS	FAILURE MODE-OUT OF TOLERANCE, DURING TOP PACKAGE TESTS, THE RATE GYROSCOPE EXHIBITED A HIGH MULL OUTPUT VOLTAGE. He pailure indication has probably the result of a test bet malfunction.	TESTS: THE RATE GYROSCOPE EXITEST SET MALFUNCTION.	IN A CITTERIA	HALL H	DUTPUT VOLT			
CORRECTIVE ACTION-WONE, FAILURE NOT CONFIRMED.	PAILURE NOT CONFIRMED.	ind philips, the splantage agreement the second second second						

SENERAL DYNAMICS CONVAIR DIVISION

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	VENDOR MANE	2/03	HOTE RATE GROUTAGE AND E	YES MINNEAPOLIS-HO NO NEYNELL JRS101AE	ASSENDLY FACTORY TESTS. GENERATOR CAP.	AND INSPECTIO A PULL TEST E THE CONTACT S	5/0 9	ESISTON MAS OF ERANCE, UNIT M	D ARE TAKING S	5/03	AMALYSIS REVEA	INCLUDED IN ME	PACE DOD
	# 5 # 5	ğ ğ	TER RELATE 6	ž č	BLY F	INTOLE CRATE VED 10	ž č	# 10 #	118 AM	¥ 0	Š.	£113	
	11 ME 01F		CANISI N THE N	FACTORY	T ASSEN	NG TECH INCORT	FACTORY	ALIBRAT MITH 1	AMALYS	CTR	e e e e e e e e e e e e e e e e e e e	COUTAC	
ř	VEHICLE DATE DIF T	420920	6 GYROSCOPE STRICTION I	\$20919 F	DURING NEX O THE BIGMA	E HIS BOND! THIS TYPE, OPERATION	1130 F	HAL GAIN. C GAINS NERE	HIB FAILURE	1130 620919	TECTOR (SHR	HANDLING R	
OFILOT BYSTEM-AIRBON	DIF DATA BOUNCE PART NUMBER	FAR E7-41703-608	GE TEST MHEN MATCHINGS LEST DOUG TO COLUMES TO INCLUDE H	7AR 27-04574-3	I MALL OUTPUT VOLTAGE RE SIGNAL GENERATOR I	THE VENDOR TO IMPROVILIMINATE FAILURES OF D. A LIGHT SANDBLAST	FAR E7-4100E-887	FOR TOO HIGH YAW 319 24.8 K-OMS AND THE	EL NERE ADVINED OF 1	FAR 27-41002-207	IN MOTOR ROTATION DE	MRMUP, COCLDOMN, AND	
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE	TEST/REPORT NUMBER FAILED COMPONENT NAME	H6-99-04-3409F REMOTE RATE 67RO	FAILURE MODE-OUT OF EXPECTED TEST VALUE, DURING THE MARRIAGE TEST MAIN MATCHING GYROSCOPE CANISTER REMOTE RATE GROW P AND THE ABORT SENSING CONTROL, OUT OF EXPECTED TEST VALUES MERE NOTED DUE TO STRICTION IN THE RATE GYROSCOPE AND E RRATIC OPERATION OF THE ABORT LEVEL ADJUSTING TRIMPOT. CORRECTIVE ACTION-VENDOR INITIATED IMPROVED INSPECTION PROCEDURES TO INCLUDE HICROSCOPIC EXAMINATION OF INTERMAL PA RTS AND IMPROVED SOLDERING TECHNISUES.	A-99-04-3373F RATE 6790	FAILURE MOE-ELECTRICAL OPEN. THE RATE GYRO EXHIBITED HIGH MALL OUTPUT VOLTAGE DURING NEXT ASSENDLY FACTO THE CAUSE OF THE FAILURE MAS A BROKEN EPOXY BOAD HOLDING THE SIGNAL GENERATOR TO THE SIGNAL GENERATOR CAP.	CORRECTIVE ACTION-RAR A-99-04-3623 WAS WRITTEN REQUESTING THE VENDOR TO IMPROVE HIS BONDING TECHNIQUE AND INSPECTIO I AND TO INCORPORATE A TEMPERATURE CYCLE AND PULL TEST TO ELIMINATE FAILURES OF THIS TYPE, INCORPORATE A PULL TEST E HIVALENT TO A LOAD OF 101 GS TO ASSURE ADEQUACY OF THE BOND. A LIGHT SANDBLAST OPERATION HAS ADDED TO THE CONTACT S RFACE OF THE END-CAP BEFORE CEMENTING.	HG-99-04-3399F AMPLIFIER CALIBRATION RESISTOR	FAILURE MODE-OUT OF TOLERANCE. THE GYRO CANISTER MAS IR/D FOR TOO HIGH YAW SIGHAL GAIN. CALIBRATION RESISTOR MAS OF THE WRONG VALUE. RESISTOR MAS CHANGED FROM 4.751 K-OMMS TO 24.8 K-OMMS AND THE GAINS WERE WITH IN TOLERANCE. UNIT M. SOLD OFF WITH THE WRONG GAIN.	RY SUPERVISION AND CHECROUT PERBOWNEL WERE ADVISED OF THIS FAILURE AMALYSIS AND ARE TAKING PR. OF FAILURE RECURRING.	и6-88-64-3400F Displacement fyro	FAILUME MODE-ATRUCTUMAL. MO-GO INDICATION RECEIVED PRON BRIN NOTON ROTATION DETECTOR (BMRD) NETWORK. AMALYBIS REVEA Led distorted flex leads for phase a and B and Broken Phase c flex lead.	CORNECTIVE ACTION-REVISED MANDLING PROCEDURES TO INCLUDE WARNUP, COCLDOMN, AND HANDLING REQUIREMENTS INCLUDED IN ME	
18 JUN 1666	131574 231574 2014	AUTOFILOY-SQUARE-A/B	FAILURE MODE-OUT OF EXPECTED TEST VAL P AND THE ABORT SENSING CONTROL. OUT O RRATIC OPERATION OF THE ABORT LEVEL AD CORRECTIVE ACTION-VENDOR INITIATED IN RIS AND IMPROVED SOLDERING TECHNIQUES.	AUTOFILOT - SQUARE-A/B	FAILURE MODE-ELECTRICAL THE CAUSE OF THE FAILURE	CORRECTIVE ACTION-RAR A-99-04-3625 WAS N AND TO INCORPORATE A TEMPERATURE CYCL QUIVALENT TO A LOND OF 101 63 TO ASSURE URFACE OF THE END-CAP BEFORE CENENTING.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLERA THE WRONG VALUE, REBISTOR AS SOLD OFF MITH THE WRONG	CORRECTIVE ACTION-FACTORY TERS TO PRECLUDE THIS TYPE	AUTOFILOT-SAUARE-A/B GTRO PACKAGE	FAILUME MODE-STRUCTURAL LED DISTORTED FLEX LEADS	CORRECTIVE ACTION-REVIEW	

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TESTABLE COMPONENT NAME TESTAREPORT NUMBER TESTAREPORT NUMBER TESTAREPORT NUMBER THE DISTANCE COMPONENT NAME THE DISTANCE COMPONENT NAME THE DISTANCE COMPONENT NAME THE DISTANCE CHANGE TO THE DISTANCE THE THE CHANGE A-89-04-3347F A-89-04-3347F RATE GYPO SWED A-89-04-3347F RATE GYPO SWED CIFICATION ON TOLERANCE-THE TWO-RATE GYROSCOPE PACKAGE SUMMING NETWORN E-SELF-CHECK GO-SIGNAL. FAILURE DUE TO A DEMACHETIZE SPIN-MOTOR ROTATION NOT THIS STUDY ARE PRESENT RELIABILITY ENGINEERS ARE ENGAGED WITH COCHIZANT DESIGN ENGINEERS IN NOT THE SPIN-MOTOR ROTATION DISPLACEMENT GYPO TRICAL). A NO-GO INDICATION WAS RECEIVED FROM THE SPIN NOTOR ROTATION D OF THE PITCH DISPLACEMENT GYPO. TRICAL). A NO-GO INDICATION WAS RECEIVED FROM THE SPIN NOTOR ROTATION D OF THE PITCH DISPLACEMENT GYPO.
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-ATRBORNE TEST/REPORT NUMBER PAILED COMPONENT NAME RED 1983. BAFFLES INCOMPORATED IN 6YROS NEAR FLEX LEADS TO PRINGER CHANGED FROM 7-04830-3 TO 7-04830-803 TO DOCUMENT THE CA-89-04-3347F RATE 6YRO 3MED RATE 6YRO 3MED RATE 6YRO 3MED RATE 6YRO 3MED CIFICATION OR TOLERANCE-THE TWO-RATE 6YROSCOPE PACKAGE SUMMING E SELF-CHECK 60-316MAL. FAILURE DUE TO A DEMAGNETIZE SPIN-MOTOR RELIABILITY ENGINEERS ARE ENGAGED WITH COGNIZANT DESIGN ENGINE RELIABILITY ENGINEERS ARE ENGAGED WITH COGNIZANT DESIGN ENGINE NOT DAMAGE TO THE SPIN-MOTOR-NOTATION-DETECTOR IF VOLTAGE IS IN HE-88-04-3400-F DISPLACEMENT GYRO OF THE PITCH DISPLACEMENT 6YRO. OF THE PITCH DISPLACEMENT 6YRO. OF THE PITCH DISPLACEMENT 6YRO. A-8N-04-4070F FAR FAR FAR SEF
HE SO 1983. BAFFICKLITES REVIEWA TEST/REPORT NUMBER FAILED COMPONENT NAME HE SO 1983. BAFFLES INCOMPONATED I MUMBER CHAMGED FROM 7-04250-3 TO A-99-04-334F RATE 67RO SMED CIFICATION ON TOLERANGE-THE TWO-R E SELF-CHECK 60-816MAL. FAILURE D ROUGH STUDY OF THIS TYPE OF FAILUR RELIABILITY ENGINEERS ARE ENGAGE NT DANAGE TO THE SPIN-NOTOR-ROTAT HG-98-04-3400-F DISPLACEMENT 67RO DISPLACEMENT 67RO DOF THE PITCH DISPLACEMENT 67RO. A-8N-04-4070F RATE 67RO RATE 67RO

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AUTOFILOT-SQUARE-A/B GYRO PACKAGE	TAILED CONTORN TAIL				
	A-88-04-3460-F BATE STRO 8PIN MOTOR	FAR 27-04574-1	SEDBLY FACTORY	YES HOMEYMELL NO	****
FAILURE MODE-CONTANINATION. THE RA THE SPIN-MOTOR WAS SHONT-CIRCUITED OLD PROBLEM MITH THE JRSSOL STROS.	FAILURE MODE-CONTANIMATION, THE RATE GYRO WAS REJECTED IN THE ELECTRONICS LAS. MHEM IT WAS MOTICED THAT PHASE C OF THE SPIN-NOTOR WAS SMORT-CIRCUITED TO GROUND, WHEN BYRO WAS DISASSEMBLED SEVERAL SOLDER SALLS WERE FOUND. THIS IS AN OLD PROBLEM WITH THE JRSIGS GYROS.	THE ELECTRONICS LAB. Disassembled bevera	MHEH IT MAS NOTIC L BOLDER BALLS MER	ED THAT PHASE C OF E FOUND. THIS IS AN	
CORRECTIVE ACTION-THE	THE VENDOR CORRECTED THIS BY REPLACING THE JRSIDS GYRO WITH AN UNSOLDERED CASE GYRO JRSIDSAZ.	AE JRSIDI GYRO WITH	AN UNSOLDERED CASE	GYRO JRSIDIAZ.	· · · · · · · · · · · · · · · · · · ·
AUTOPILOT-SQUARE-A/B	A-88-04-3583F RATE 67FO	FAR 27-04574-3	620914 FACTORY	YES HIMEAPOLIS-MO NO NEVMELL JRSIGSAZ	250900
FAII.URE MODE-ELECTRICA E WAS DUE TO A BROKEN	FAILURE MODE-ELECTRICAL OPEN, DURING MANUFACTURING TESTS, THE GYROBCOPE EXHIBITED A HIGH MULL OUTPUT WOLTAGE. FAILU RE MAS DUE TO A BROKEN SIGNAL GENERATOR EPOXY BOND.	NE GYROSCOPE EXHIBI	TED A HIGH MALL OL	TPUT WOLTAGE. FAILU	
CORPECTIVE ACTION-FEN T THE CENENT BOND IS OF INLESS STEEL ENDCAP BET	CORPECTIVE ACTION-PER RAR A-59-04-3623 THE VENDOR HAS ADDED A PULL TEST EQUIVALENT TO A LOAD OF 10163 TO INSURE THA THE CENENT BOAD IS OF SUFFICIENT STRENGTH, A LIGHT SANDBLAST OPERATION WAS ADDED TO THE CONTACT SURFACE OF THE STA MLESS STEEL EXDCAP BEFORE CEMENTING TO INCREASE THE STRENGTH OF THE BOND.	A PULL TEST EQUIVA (ST OPERATION NAS AD IN OF THE BOND.	LENT TO A LOAD OF DED TO THE CONTACT	10163 TO INSURE THA SURFACE OF THE STA	
AUTOPILOT-SQUARE-A/B	A-99-04-3572F RATE 67RO	FAR 27-04574-3	\$20914 FACTORY	YES HINNEAPOLIS HO NO NEVMELL JRSIDIAR	16037
FAILURE MODE-OUT OF TO PROBABLY THE RESULT OF	' TOLERANCE, THE BATE ETRO EXHIBITED A HIGH MULL QUIPUT VOLTAGE, THE FAILURE INDICATION MAS MOST OF A MALFUNCTION OF THE TEST EQUIPMENT.	ION MALL QUIPUT VOLT	NGE. THE FAILURE I	NDICATION MAS HOST	
RECTIVE ACTION-NOME	CORRECTIVE ACTION-NOME, FAILURE NOT CONTINUED.				
AUTOFILOT-SQUARE-A/B GYAO PACKAGE	A-8N-04-4215F Seet0-TRANS18TOR	FAR 27-41002-855	GEODIS ALTUS	YES 60/C NO	*****
FAILURE MODE-OUT OF TO M THE BANE REABON ALL	PAILURE MODE-OUT OF TOLERANCE, SHED CUT-UT HAS LOW. ONE CAHNISTER FROM SHILLING AND ONE FROM MALKER WERE REJECTED F OR THE SAME REASON ALL THREE FAILURES HERE DIE TO HIGH LEAKAGE IN 2013S TRANSISTOR IN SHED SCHNIDT TRIGGER CIRCUIT.	MISTER FROM SHILLIN IGE IN RN756 TRANSIS	S AND CHE FROM WAL	KER WERE REJECTED F	,
RECTIVE ACTION-CAUB	CORRECTIVE ACTION-CAUSE OF HISH LEAKAGE WAS NOT DETERNINED. NO CORRECTIVE ACTION TAKEN.	, NO CORRECTIVE ACTI	ON TAKEN.		
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9841 WY ST	DIPPICULTIES REVIEW-AUTOFILOT SYSTEM AIRBORNE	TOPILOT SYSTEM AIRBOR	¥				ſ
BYBTEN BIB-BIBTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SCURCE PART NUMBER	VEHICLE AT	\$17E P	PRI VEN	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-BOUNE-A/B STRO PACKASE	A-BN-04-3507-F DISPLACEMENT STRO TRANSISTOR	FAR 27-41002-635	SECOSIE AAFB		TES 60/C NO		
FAILURE MODE-OUT OF TO ANSISTOR ENGSS IN TORGUE	FAILURE MODE-OUT OF TOLERANCE, YAW 6YRO MOULD NOT MULL DURING A/F SYSTEMS TEST, ATTRIBUTE: Ansistor endis in torguer amp, due to marginal circuit delign, see also far a-sm-04-3308f,	MOT MULL DURING A/P SYSTEMS TEST. CIRCUIT DESIGN. SEE ALBO FAR A-SM-	, ATTRIBUTED TO THERMAL RUMANAY OF W-04-3508F.	O THER	MAL RUS	# P TAIL	
CORRECTIVE NaliON-TORE	CORRECTIVE 1, 1, ON-TORGUER AMP REDESIGNED USING 21496 TRANSISTORS AND SHIROVED HEAT SINKS. RAR	BISTORS AND INFROVED	HEAT SINKS. RA	0-00 E	98-04-474.		
AUTOFILOT-SQUARE-A/B	SP-00-04-3367F ROLL DISPLACENENT GYRO WIRE	FAR 27-41002-083	820912 ETR	F Z	T O		190041
FAILURE MODE-STRUCTURAL, THE ROLL CHAMMELL SHIFT IM FINED RESTRAINTS DUE TO FLEXLEAD		DRIFT WAS OUT OF TOLERANCE. THE FAILURE WAS CONFIRMED AND MAS CAUSED BY A DISTORTION IN THE ROLL DISPLACEMENT GYRO.	URE MAS CONFIR	8	*	A VS CO SY A	
CORECTIVE ACTION-60/C D MARCH ED, 1963) BAFFLI	CORRECTIVE ACTIOY-60/C INCORPORATED NEW MANDLING REQUIRENENTS INTO APPLICABLE PROCEDURES. (REF-NEMO) MARCH 20, 1963) BAFFLES ARE BEING INSESTED INTO 67806 MEAR PLEXLEADS TO PRECLUDE PLEXLEAD BREAKAGE	ENTS INTO APPLICABLE NA PLENLEADS TO PRECL		EF-HEN REAKAG	0 356-2 0 0 0 0 0	(REF-NEMO 356-2-5063 DATE) BREARAGE OR DISTORTION.	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-3531F DISPLACEMENT 61RO NOTOR	FAR 7-04250-8	620911 FACTORY	1	YES KEARFOTT NO C70-2504	KEARFOTT C70-2504-000	208664
PAILURE MODE-STRUCTURAL S TESTING REVEALED THAT MORMAL.	PAILURE WODE-STRUCTURAL. THE REPORTED FAILURE WAS A MOISY BEARING AT ST.E OPERATIONAL HOURS. DURING FAILURE AHALTSI 8 TESTING REVEALED THAT THE GYROGCOPE SPIN MOTOR WAS BATISPACTORY. IT WAS ALSO MOTED THAT THE MOISE LEVEL HAS MOT AS MONHAL.	NOIST BEARING AT SI.E OFERATIONAL HOURS. DURING FAILURE ANALTS! BATIBFACTORY. IT MAS ALSO NOTED THAT THE NOISE LEVEL HAS NOT AB	ATIONAL HOURS. NOTED THAT THE	PURTY NOT SE	e FAIL	JRE AHALYSI HAS NOT AB	
CORRECTIVE ACTION-FAIL!	CORRECTIVE ACTION-FAILUNE NOT CONTINHED. NO CORRECTIVE ACTION. FACTORY PERSONNEL MERE INFORMED THAT THERE IS NO CRI Teria for rejection of Gyrob based on Noisé Alone.	TIOM, PACTORY PERSONS	EL NERE INFORM	CD THA	T THER	E 18 NO CR1	
AUTOFILOT-EQUARE-A/B	A-A8-G4-1479-F EXCITATION TRANSFORMER MIRINS	FAR 27-04880-8	620810 FACTORY		YES TRANSONIC HO	45CH1C	7.1747
FAILURE MODE-OUT OF TO THE EXCITATION TRANSFOR E INTERCHANGED.	FAILURE MODE-OUT OF TOLERANCE. BOOGTER AND BUSTAINER ENGINE MOVENENTS MERE OUT OF TOLERANCE. IRREGULARITY TRACED TO THE EXCITATION TRANSFORMER. THE CAUSE OF PAILURE OF THE TRANSFORMER WAS INCORRECT WIRING. LEADS TO PINS D AND T MER : INTERCHAMEED.	NE HOVEMENTS MERE OUT RANSFORMER MAS INCORN	OF TOLERANCE. ECT WIRING. LE	IRREG ADS TO	ULARITY	TRACED TO AND T MER	
CORPECTIVE ACTION-RECE!	CORRECTIVE ACTION-RECEIVING INSPECTION TEST PROCEDURES REVISED TO MORE CLEARLY DEFINE THE TEST REQUIRED FOR INSPECT OM.	VISED TO MORE CLEARLY	DEFINE THE TE	15 PC	UIACO	OR INSPECT	
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	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	OFILOT SYSTEM-AIRBOR	¥		,
BYSTEN BAS-STREN	TEAT/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	BITE PRI VENDOR NAME	
AUTOFILOT-SEUARE-A/B STRO PACKAGE	SP-AB-04-3383-F 67RO HEATER BENSOR RING	FAR R7-44554-8	161-0 FACTORY 620910	¥6.	
FAILURE HODE-SHORT, SY! R SENSOR WINDINGS WHEN T OF RESISTANCE WINE MA	FAILURE MODE-AHORT, GYRO PKG, NGS REJECTED FOR TOO NIGH TORGUING GAINS. TROUBLE TRACED TO THE PITCH GYRO FING HEATE R BENSOR WINDINGS UNICH NAS BHORTED TO GROUND. THE RESISTANCE MINDING HAD A BARE SPOT IN THE INSULATION. A FAULTY LO T OF RESISTANCE MIRE HAD BEEN RECEIVED IN SPRING OF 1842. THIS STOCK WAS PURGED OUT OF EXISTING STOCK.	RAUING GAINS. TROUBL CE NINDING HAD A BAR HIS STOCK WAS PURGED	E TRACED TO THE PIT E BPOT IN THE INSULING BIT	CH GYRO PINE HEATE ATION: A PAULTY LO OCK.	
CORRECTIVE ACTION-SINCI	SINCE THIS IS THE CALY FAILURE OF THIS TYPE SINCE PURGING THE STOCK NO FURTHER CORRECTIVE ACTION	YPE BINCE PURGING TH	E STOCK NO FURTHER	CORRECTIVE ACTION	
AUTOFILOT-BEUMRE-A/B 67RO PACKAGE	CT-99-04-038F DISPL-CEDENT SYRO-MIRING	FAR 7-04250-8	GEDSOS FACTORY	YES KEARFOTT NO	
FAILURE HODE-OPEN, ELE EAD. THE BREAK OCCURRED	FAILURE MODE-OPEN, ELECTRICAL. UNIT REJECTED POR INSUFFICIENT SMRD GUTPUT, FAILURE ATTRIS EAD. THE BREAK OCCURRED AT THE POINT WHERE THE INSULATION MAD BEEN STRIPPED FROM THE WIRE,	ENT SAND CUTPUT. FAI AD BEEN STRIPPED FRO	FAILURE ATTRIBUTED TO A BROKEN PHASE B L. FROM THE MIRE,	A BROKEN PHASE B L	
CORRECTIVE ACTION-CONT	CORRECTIVE ACTION-CONTACT WITH REARPOIT REVEALED MECHANICAL WIRE BIRIPPERS WIRE DISCONTINUED IN OCTOBER 1962 AND RE LACED WITH THERMAL BIRIPPERS.	L WIRE STRIPTERS WIN	E DISCONTINUED IN C	CYCSER 1962 AND RE	
AUTOFILOT-SQUARE-A/B SYRO PACKASE	A-99-C4-3327F 67RO-01 BPLACDIGNT	FAR 7-04250-8	AEDBOA PACTORY	YES KEARFOTT NO CTG-ESGS-GOG	6 1 2 5 6 1 3
FAILURE MOSE-OUT OF SPI AME BEEM APPROXIMATELY : LE THAT THE BHRD WINDIM	FAILURE MOSS-OUT OF SPECIFICATION OR TOLERANCE-THE RESISTENCE BETWEEN PINS 1 AND 2 WAS ONLY EO OHN WHEN IT SMOULD M AND BEEM INPROVIMATELY 150 OHHS. THE FAILURE MAS NOT CONTINED. THE STRONGOURE WAS REJECTED ERRONGOUSLY, IT IS PONSIS LE THAT THE SHED WINDING RESISTENCE WAS MISTAKEN FOR THE SPIN-MOTOR WINDING RESISTENCE.	NCE BETHEEN PINS 1 A MED. THE STRONCUPE V IN-MOTOR WINDING RES	ND E MAS CHAT EN CHAMBE REJECTED ENROHECTED	M WHEN IT SHOULD H WALY, IT IS POSSIB	
CORRECTIVE ACTION-LIBERIOUM.	O.♣.		Annapagi berdininan perininan pengangan berdiningan pengangan	eenapayraasi een daaaa ay adadaay aasaa aasaa aasaa ah	
AUTOFILOT-SEUARE-A/B SYNO PACKAGE	A-98-04-3481-F RATE GYRO SIGNAL GENERATOR	FAR 27-41002-855	\$20903 DAFB	VES NO	884208
FAILURE MODE-ELECTRICAL AB TRACED TO AN OPEN CII BONDING MATERIAL MAICH I	FAILURE MODE-ELECTRICAL CMEM. THE 6TRO PACKAGE WAS IR7D WHEN THE ROLL NATE 6TRO COULD NOT BE TORGUED. THE FAILURE I AS TRACED TO AM OMEN CIRCUIT SECONDARY WINDING OF THE SIGNAL GENERATOR. THE OFEN CIRCUIT WAS CAUSED BY EXCESS EPOXY BONDING MATERIAL MAICH WHEN CURED PULLED BACK AND TENGED THE WINDING AND CAUSED IT TO OPEN.	EN THE RCLL MATE 6YR L GENERATOR, THE OPE E MINDING AND CAUSED	O COULD NOT BE TORGING CAUSE CAUSE	UED. THE PAILURE W. D BY EXCESS EPOXY	
CORRECTIVE ACTION-VENDOR	VENDOR INSTITUDED 10G-PERCENT INSPECTION OF THE SIGNAL GENERATOR ASSEMBLY, CONCENTRATING ON CONTA MIRES.	OF THE BIBMAL BENEZ	ATOR ASSENDENT, CONC	ENTRATING ON CONTA	
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AUTOPILOT- SQUARE-A/B OTRO PACKAGE	3P-60-04-3456-F RATE 67RO	FAR 27-41708-808	15.020	#	YE& 60/C	•
FAILURE MODE-OUT OF TOLE IN THE YAM-RATE BYRO GUTP	FAILURE MODE-OUT OF TOLERANCE. THE REMOTE RATE 67RO PACKAGE MAS REJECTED DURING APCHE AUTOPILOT SYSTEM CHECKOUT MHE N THE YAN-RATE 67RO GUTPUT REMAINED AT MAXIMUM POSITIVE AND COULD NOT SE LOMERED. SUSPECT TEST EQUIPMENT MALFUNCTION	E MAS REJECTED DURIS COULD NOT SE LOMERS	46 APCHE A ED. BUBPEC	UTOFILOT T YEST KO	STATEM CHECKOUT WHE	
CORRECTIVE ACTION-FAILURE NOT C	ILURE NOT CONTRHED DURING 60/C FUNCTIONAL TESTS AND VENDOR TEARDOWN INSPECTION. BASE PERSONNEL NE RESULTS.	ONAL TESTS AND VENDO	OR TEARDOM	N INSPECT	ION. BASE PERSONNEL	1
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	SA-AB-04-3351F RATE GTRO BMD	FAR 27-41703-809	1480	FACTORY	YES HO	057.44
FAILURE MODE-OUT OF TOL ATE GYRO SPIN-MOTOR ROTA D SHRID MAGNET.	FAILURE MOE-OUT OF TOLERANCE. THE REMOTE THREE-RATE GYRO GROUP WAS REPORTED FAILED BUE TO NO OUTPUT FROM THE YAW A ATE GYRO SPIN-NOTOR ROTATION DETECTOR (SARD) CIRCUIT. THIS PAILURE WAS FOUND TO BE CAUSED BY A PARTIALLY DEMAGNITIZE D SHRD MAGNET.	GROUP WAS REPORTED I	AILED DUE	70 M V M O OU	TPUT FROM THE YAM I RTIALLY DEMAGNSTIZE	
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME, EXACT CAUSE OF THIS TYPE OF FAILURE COULD NOT BE DETERHINED.	E COULD NOT BE DETEN	THINED.			
AUTOFILOT-SQUARE-A/B	A-99-04-3542F RATE STRO	FAR 27-45045-5	620631	DYESS	<u>Q</u> Q	807 170 80
FAILURE MODE-FAIL DURING OPERATION. T NS. IT LAS DETERMINED TRAT THE -S CONF PREVIOUS FAILURES HAVE INDICATED THAT OPILOT FAIL INDICATION DURING TANKING.	FAILURE MOCE-FAIL DURING OPERATION. THE TWO-MATE GYROSCOPE PACKAGE GAVE A FAILED INDICATION DURING TANKING OPERATION NS. IT NAS OCTERNINED THAT THE -8 CONFIGURATION PER ECPISAT. PREVIOUS FAILURES MANE INDICATED THAT THE OPERLAPPING TOLERANCES USED IN THE -8 CONFIGURATION COLLD RESULT IN AM AUT OPILOT FAIL INDICATION DURING TANKING.	PACKAGE GAVE A FAIL BEEN USE INSTEAD OF ANCES USED IN THE!	LED INDICA THE -805 CONFIGUR	TION DURIN	WG TANKING OPERATION PER ECP1667. LD RESULT IN AN AU	
CORRECTIVE ACTION-WOME.		Affiliance in the control of the change of t				
AUTOPILOT-SJUARE-A/S GYRO PACKAGE	/P4-4CG-01-118 67RO	COMPOSITE-B FACT E7-41002-887	1130	£.	YES NO	
FAILURE MODE-OUT OF SPE MBIMED SYRO-DECODER DRIF	FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE. AN ABNORMAL ROLL DISPLACEMENT 67RO DRIFT HAS OBSERVED DURING THE CO MEINED STRO-DECODER DRIFT TEST. OPERATION MAS SATISFACTORY DURING THE MORMAL DRIFF TEST.	L ROLL DISPLACEMENT DURING THE NORMAL DI	EYRO DRIF	4 Ms 08	ERVED DURING THE CO	
B. STEN EFFECT-INPROPER	ER AMILOS BIGHALB.					······································
WENTELE EPPECT-NONE.						
CORRECTIVE ACTION-UNKNO	(HCMM: (FAR 98-04-8844).					
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VEHICLE BITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO	YES 60/C	THE HEATER CONTROL MAGNETIC AMPLIFIER TOTO R COMPLIED, EFFECTIVE 4 MARCH 1983.	ZBML RUMMAY O ALBO RAR 35G7-	MS KECELVED. T 3 304 OF DECK R A MARCHE MALFU	YES MINNEAPOLIS-HO NO NETHELL JRS-101AE
0 H	ដូខ្វ	ETIC	75.8 80 7 748 866	3 5 8 2 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	, , ,
817E 11HE DIF	MALKER	TROL MAGN	AAFB CAUSED B	PAFE (SMED) HO CO-CO MAD INDICA	FACTORY TOO HISH.
VEHICLE DATE DIF	620029	EATER CON-	READING.	420622 420622 64VE THE I	REDEET TRUIT LAS
DIF DATA BOURCE PART NUMBER	FAR E7-4100E-855	THE RESISTOR.	ET-41002-855 GYRO CAUSED NO-CC .arcm) DUE TO MARGIL	FAR E7-410GE-855 E7-410GE-855 E MAPCHE CARU THAT E MAPCHE CARU THAT B. A MO-60 READING	FAR E7-04874-8 ERANCE WHEN MULL OU
TEST/REPORT HUNDER FAILED CONFOMENT NAME	A-08-04-3450-F AMPLIFIER RESISTOR	FAILURE HODE-OUT OF TOLERANCE, GYRO PACKAGE FAILED WHEN ALSISTON N-8, OF THE HEATER CONTROL MAGNETIC AMPLIF 1, ONANGED VALUE BUE TO AGING. THIS IS A DEPOSITED CARBON TYPE RESISTOR. CORRECTIVE ACTION-GD/C RECOMMENDED USE OF METALLIC FILM RESISTORS. VENDOR COMPLIED, EFFECTIVE A MARCH 1985.	UTOPILOT-SQUARE-A/B A-9N-D4-3308F FARMISTOR ET-41002-855 APE TES NO TRANSISTOR TRANSISTOR ET-41002-855 APE TES NO FAILURE MODE-CUT OF TOLERANCE, TORGUING GAIN OF PITCH DISPL, GYRO CAUSED NO-GC READING, CAUSED BY THERMAL RUMANAY OF TRANSISTOR ENGSS AND BURNING OF RESISTOR RED GRHTTER RESISTOR) DUE TO MARGINAL CIRCUIT DESIGN, SEE ALSO RAR 3507-F.	COFRECTIVE ACTION-YORQUER AND. REDESIGNED USING EN498 TRANSISTORS AND INPROVED HEAT SINKS. UTCPILLOT-SQUARE-A/B A-8F-04-3570F FAR 4208E2 PAFB NO ATTION-SQUARE-A/B 6208E2 PAFB NO BATTLOTE HODE-CALL ASTRONANCE-OUTING A MARCHE CHECKOUT, A SPIN-MOTON ROTATION-DETECTOR (SAND) HO-60 MAS CARD 304 OF DECK ENTERINGE INDICATION WAS CAUSED BY A MARCHE MALFUNCTION. THE MAPCHE CARD THAT GAVE THE NO-60 MAS CARD 304 OF DECK ENTERIOR. F-98451-503. THIS CARD CHECKS 67RO SPEED LOW TRANSITION BUT B. A MO-60 READING UN THIS CARD INDICATES A MARCHE MALFUNCTION.	CONRECTIVE ACTION-MOME. FAILURE NOT CONFIRMED. FAR 4-98-04-3454-F RO PACKAGE RO PACKAGE RO PACKAGE RO PACKAGE RO PACKAGE ROTE STRO RO PACKAGE ROTE STRO ROTERANCE WHEN MULL OUTPUT WAS TOO HISM. CORRECTIVE ACTION-MOME. THE FAILURE WAS NOT CONFIRMED IN TESTS PERFORMED BY 60/C AND THE VENDOR.
BUB-BYBTEN	AUTOPILOT-SQUARE-A/B GYRO PACRAGE	FAILURE MODE-OUT OF TOLE -1, CHANGED MILUE BUE TO CORRECTIVE ACTION-60/C A	AUTOFILOT-SQUARE-A/B SYNO PACKAGE FAILURE MODE-OUT OF TOLE F TRANSISTOR ENSSE AND BY	COFRECTIVE ACTION-TOROUGE AUTOFILOT-SQUARE-AUB GYRO PACKAGE FAILURE HODE-OUT OF TOLE HE FAILURE HOLCATION WAS 7-98431-503. THIN CARD OF HETION.	CORRECTIVE ACTION-MOME. AUTOFILOT-BAUARE-A/B EYRO PACKAGE PAILUME MODE-OUT OF TOLE CORRECTIVE ACTION-MOME.

SENERAL DYNAMICS CONVAIR DIVISION

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VEHICLE ATTE PRI VENDOR NAME DATE DIF THE DIF OTH VENDOR PART NO	MINNEAPOLIB-HO NEYNELL JRBIDIAZ	.Y. THE PASLUME	ITH A REPORTED		URE OF AN ABOR	YES GG/C	301ED TO HIGH N	PA6E 0401
9 0 TH	99	ERMALL	ON THE	22	ENGRALIA ENGRALIA	25.05	ATTRIU. EARNEI	
11 ME 01	FACTORY	03T	E18 2	FACTORY	ABORT-1	DAFB	RE IES	
VEHICLE DATE DIF	##O##	MORT-CIRCUI	1130 420419 D AS PART O	1130 \$20419	GED BY THE	72F 020010	HASE, FAILURILEYERS IM	
DIF DATA SO.NCE PART NUMBER	FAR R7-04574-3	MAS REPORTED TO BE B HERE HAB NO FAILINE.	FAR 627-41703-609 D PACKAGE WAS RETURNE FAILURE OF GYRO CANIS	FAR E7-41002-697	RHED AS PART OF A SYS PACKAGE MAS NOT DAMA	FAR 27-45043-603	AUSE OF THE BENT AUAD AUSE OF THE BENT AUAD AUSE.	
TEST/REPORT NUMBER DIF	A-119-04-35339F 6TRO-RAIE	ITLECT)-DUKING BENCH TESTING THE GYRO WAS REPORTED TO BE SHORT-CIRCUITED INTERNALLY. THE PAILURE COMPLETE EXAMINATION INDICATED THAT THERE HAS NO FAILURE.	H6-99-04-3343F FAR 1150 ETR NO RATE GYRO TOLERANCE, THE REMOTE THREE-RATE GYRO PACKAGE WAS RETURNED AS PART OF A SYSTEM WITH A REPORTED SCHOLD. UNIT IN SATISFACTORY FOR SE	MO FAILURE. HG-98-04-3344F DISPLACEMENT GTRO	FAILURE MODE-OUT OF TOLEBANCE. THE GYRO PACKAGE MAS PETURNED AS PART OF A SYSTEM WITH A REPORTED FAILURE OF AN ABOA T-SENSING CONTROL UNIT. 11R DYDSIS) TESTS SHOWED THE GYRO PACKAGE MAS NOT DAMAGED BY THE ABORT-SENSING CONTROL UNIT FAILURE. CORRECTIVE ACTION-MONE-NO FAILURE.	A-99-04-423gF RATE 67RO	FAILUNE MODE-STRUCTURAL, TWO RATZ GROUP FAILED PITCH TORGUING GAIN IN MINUS PHASE, FAILURE W.B ATTRIBUTED TO HIGH N ALL IN PITCH RATE GYNO CAUSED BY BENT GUADRILEVERS. THE CAUSE OF THE BENT GUADRILEVERS MAS NOT LEARNED. CORRECTIVE ACTION-HOME. CAUSE OF FAILURE WAS NOT LEARNED.	
3737EH 816-8137KH	AUTOPILOT - SQUARE - A/B GTRO PACKAGE	FAILURE MODE-SHORT (ELECTING MAS NOT CONFIRMED. CONFICORD CONFICORD CORRECTIVE ACTION-MOME.	AUTOPILOT-SQUARE-A/B GYRO PACKAGE FAILURE MODE-OUT OF TOXI	CORRECTIVE ACTION-NOWE-NO FAILURE. AUTOPILOT-SQUARE-A/B HG-88-G4- GTRO PACKASE DISPLACEN	FAILURE MODE-CUT OF TOLERANCE, THE T-SCHAIMS CONTROL UNIT, LIR BTD316) FAILURE, CORRECTIVE ACTION-NOWE-NO FAILURE,	SUTOFILOT-SQUARE-A/B GTRO PACKAGE	FAILURE MODE-STRUCTURAL MLL IN PITCH RATE 67NO C. CORRECTIVE ACTION-WOME.	

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SYSTEM-AIRBORNE
 BENITH-AUTOPILOT
DIPTICITY TIES

	DIFFICULTIES REVIEW-AUTOFILD: STSTEM-AIRSCRAF	OFICE BIBIEN-AIRBO	¥.			
SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	\$116 11#E DIF	PRI VENDOR NAME OTH VENDOR PART HO	
UTOFILOT-BRUNE-A/B	A-99-04-4299C 67RO, DISPLACEMENT	FAR 7-04250-#	a 1 a 0 3 a	FACTORY	YES RESPECT.	******
FAILURE MODE-DRIFT, 67RG	SYNO WAS REJECTED FOR DRIFT. THE SYNO WAS NOT BUBHITTED FOR FAILURE AMALYBIA.	WAS NOT BUBMITTED FO	A FAILURE	AMALY BIS		
CORRECTIVE ACTION-NOME.			الم كالماسية المجاولية المراجعة المجاولة الم	- 1 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A Series of the contract of th	re gage of action for the control of
AUTOPILOT-SQUARE-A/B	A-99-04-4298C SYRO, DISPLACEMENT/SAMED	FAR 7-04250-3	910039	FACTORY	YES KEARFOTT NO CTRESOMODO	*******
FAILURE MODE-OUT OF TOLE	TOLERANCE. THE SYRO HAD NO SHALD GUTFUT. THE SYRO WAS NOT BUSHITTED FOR FAILURE AMALYSIS.	. THE GYRO WAS NOT (UBALTTED P	סא געורת	IE AMALYBIB.	
CORRECTIVE ACTION-HOME.					a en en en en en en en en en en en en en	
AUTOPILOT - SQUARE - A/B GTRO PACKAGE	A-A9-04-3512F RATE 67RO	FAR 27-43045-805	619029 426	FACTORY	YES NO	69722 9
FAILURE MODE-ERRATIC CMP. AILURE MOT RESOLVED, INTE	C CHERATION, DURING HAPCHE, CHECKOUT, NO OUTPUT FROM YAW RATE 6180, FAILURE CONFIRMED, CAUSE OF INTERNITTENT IN NATURE.	OUTPUT FROM YAM RAT	E GYRO. FA	וורואני כמ	FIRMED, CAUSE OF F	
CORRECTIVE ACTION-NOME.					a principina principina di distributi di distributi di distributi di distributi di distributi di distributi di	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-3534F GTRO-BATE/344CD	7AR R7-04674-8	620815-4 FACTORY E0919	FACTORY	TES KINNEAPOLIS-HO NO METMELL JRS 101AZ	004713
FAILURE MODE-OUT OF TOLE MOTATION DEPENDENCE (MOTATION DEPENDENCE) TO THE SMED MINDINGS WHE (A/MIDTE) RESULTING IN	FAILURE MODE-OUT OF TOLERANCE, FOUR RATE GYROS FAILED. IN EACH CASE THERE WAS EITHER INSUFFICIENT OR NO SPIN-MOTOR MOTATION DETECTOR ISMED) OUTPUT. THE REPORTED FAILURES WERE COMFIRMED AND ARE ATTRIBUTED TO MISAPPLICATION OF VOLTAGE TO THE SMED WINDINGS WHICH CAUSED THE WINDINGS TO BE BURNED OPEN (S/NS 1003), 825 AND 801) OR DENACHETIZED THE MACHET (S/MS) RESULTING IN THE OUT-OF-TOLERANCE SMED OUTPUT.	EACH CASE THERE WAS CONTINUED AND ARE AT ID OPEN (8/NS 1003), I	EITHER INS TRIBUTED T	O HIBAPA	TOR NO SPIN-HOTOR ICATION OF YOUTHER MANE	
CORRECTIVE ACTION-THE SC DANAGE DUE TO INADVERTEN	CORRECTIVE ACTION-THE SOM-SOF 107-118 DATED JULY 28,1982 HAS SENT TO ALL SITES AND TO FACTORY PERSONNEL ADVISING OF DAMAGE DUE TO INABUERIENT VOLTAGE APPLICATION TO SAND CIRCUITRY.	WS SENT TO ALL SITE! UITRY.	AND TO FA	CYCHY PE	SOMECL ADVISING OF	
					PAGE DADS	

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8787EM	TEST/REPORT NUMBER	DIF DATA SOURCE	VEHICLE DATE DIF	817E 11MC 01F	PRI VENDOR NAME OTH VENDOR PART NO	¥ -	
AUTOFILOT-SQUARE-A/B BYRO PACKAGE		เบเลา	57F 620810	3.5	7.E.s	0.00	9
FAILURE MODE-OPEN CIRCUIT (ELE SIGH OF A ROLL STEERING SIGHAL R ANNLIFIER, ROLL DISPLACENENT	FAILURE WODE-OPEN CIRCUIT (ELECT) -A CIRCUIT DISCONTINUITY DOMNSTREAM OF THE ARMA GUIDANCE SYSTEM PREVENTED TRANSMIS SION OF A ROLL STEERING SIGNAL AFTER LIFTOFF, DIFFICULTY NOT ISOLATED BUT MOST PROBABLY OCCURRED IN ROLL GYRO TORBUE R AMPLIFIER, ROLL DISPLACEMENT GYRO OR TORBUEN EXCITATION WIRING.	DOMNSTREAM OF THE ALL DOLL ISOLATED BUT MOST WAING.	RMA GUIDAN PROBABLY	CE BYSTE) OCCURRED	H PREVENTED TRAN	13 M 1 B	
SYSTEM EFFECT-IMPROPER DISCRETE SITES BY ROLL RATE 6YRO DATA OF 0.07 DEG THE VEHICLE TO THE CORRECT AZIMUTH.	DISCRETE SIGNAL-ROLL GYRO SIGNAL AMPLIFIER RECEIVED VERY LOW LEVEL ROLL SIGNAL (AS EVIDENCE) Of 0.07 deg/sec against 10 deg/sec maximum expected) resulting in failure of system to roll Ct azimutm.	IMPLIFIER RECEIVED VE HAXIMUM EXPECTED) R	RY LOW LEV EBULTING I	א לאונטור י דו אסנו	SICHAL (AS EVIDENCED E OF BYSIEM TO ROLL	CALL	
WHICLE EFFECT-IMPROPER TRAJECT SS DEGREES TO RIGHT OF SPECIFIED	TRAJECTORY-FAILURE TO COMPLETE ROLL PROGRAMS REQUIRED RESULTED IN TRAJECTORY APPROXIMATELY PECIFIED. VEHICLE WAS DESTROYED BY RANGE SAFETY COMMAND AT 87.83 SECONDS.	DLL PROGRAMA REGUÍRED 7 RANGE BAPETY COMMAN	REBULTED D AT 67.63	IN TRAJE	CTORY APPROXIMA	٦.	
CORRECTIVE ACTION-NOIG.						1	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-9L-04-3461-F YAW 67RO RESISTORS	FAN E7-41002-855	101F 620809	2	Y CO	96778	78
FAILURE MODE-OUT OF TOLERANCE. ATIONS DECREASED IN RANGE TO BEI CHANGED DOMMARD IN VALUE ALLONI N RESISTORS.	FAILURE MODE-OUT OF TOLERANCE. THE YAW GYRO HEATER VOLTAGE OBCILLATED BETWEEN D AND BO VDC. AFTER 45 MIN THE CACILL ATTIONS DECREASED IN RANGE TO BETWEEN 30 AND 80 VDC. THE PEEDBACK RESISTORS R-4 AND R-14 IN THE MACHET AMPLIFIER HAD CHANGED DOMBGARD IN VALUE ALLOHING THE AMPLIFIER TO OBCILLATE. CAUSE OF THE PAILURE MAS AGING OF THE DEPOSITED CARB HESISTORS.	GE OSCILLATED BETMEEN EEDBACK RESISTONS R-A LATE, CAUSE OF THE PA	ETMEEN O AND BO MB R-6 AND R-14 THE PAILURE NAB	VDC. AFT IN THE P ABING OF	VDC, APTER 49 MIN THE CACILL IN THE MACHET AMPLIFIER HAD AGING OF THE DEPOSITED CARBO	ACTUL HAD CARBO	
CORRECTIVE ACTION-EFFECTIVE 4	CTIVE 4 MARCH 1965 ALL CARDON DEPOSITED RESISTORS ARE REPLACED WITH METALLIC FILM RESISTORS.	SITED RESISTORS ARE	REPLACED W	TTH METAL	LLIC FILM RESIST	GRS.	
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-9L-04-3476-F ROLL TORGUER TRANSFORMER	FAR E7-41002-855	35F	ואים	YES 40/C	40	101101
FAILURE MODE-OUT OF TOLERANCE.	ILURE MODE-OUT OF TOLERANCE. THE GYRO PKG, WAS IR/D FOR LOW ROLL TORBUING GAIN, FAULT WAS TRACED TO TRANSFORMER (P/NET-D4579) WHICH HAD A POOR BOLDER JOINT ON PINS 1 AND R.	AR LCH ROLL TORBUTHE AND E.	CAIN. FAUL	T. S.M. T.	ACED TO TRANSPOR	1 H.T.R. T	
CORRECTIVE ACTION- VENDOR REQUE	OR REQUESTED TO IMPROVE QUALITY CONTROL.	XTROL.					
AUTOFILOT - BELLARE - A/B GTRO PACKAGE	HG-99-04-3308F RATE GYRO BAND	FAR E7-41703-609	4,80804	FACTORY	17 NO 60/C		
FAILURE MODE-OPEN (ELECT RE REVERSED. ONLY THE CO	FAILURE MODE-OPEN(ELECT). TWO RATE GYRO CANISTERS WERE DAMAGED DURING VIBRATION TRSTING WHEN PLUGS ULJA AND PBOI NA Re Reversed. Omly the course and pine meater voltages mere applied. The pitch rate shad circuits were found open in Roth cannisters. No other malpunctions were detected.	DAMACED DURING VIBRAT RE APPLIED. THE PLICA	FION TESTII	NG WHEN P	PLUES USJA AND P TS WERE FOUND OF	EN 16	
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BYBYEN	TEST/REPORT NUMBER	DIF DATA BOURCE	VEHICLE DATE OIF TIE	BITE PRI TIME DIF OTH	VENDOR HAME VENDOR PART HO	
CORRECTIVE ACTION-60/C ISSUED W		NG COLOR COOING OF C	ABLES TO PREV	ENT THIS	TPE OF FAILURE.	
AUTOFILOT-SAURE-A/B	HG-88-D4-3303F D13FLACEMENT 67RO	FAR 27-41002-887	620503 FA	FACTORY YES		097545
FAILURE HODE-OUT OF TOLERANCE. E CANISTER WARMOP. AM INTOLERA	FAILURE HODE-OUT OF TOLERANCE, YAW DISPLACEMENT AVERAGE SENSITIVITY WAS HIGH. PAILURE REPEATED TE CANISTER WARHOP, AM INTOLERANCE CONDITION WAS OBTAINED WHILE ALLOWING CANISTER TO WARHUP AND CARDETTIVE ACTIONLARY PROCEDURES LEDE ARCIPIED FOR SYROSCOPE WARHUP, HANDLING, SHUTDOAN, AND 8	MENSITIVITY WAS HIGH. MHILE ALLOWING CANIS HOPE WARMJE, HANDLIN	PAILURE REPE TER TO MARMUP (G. BHUTDOM),	ATED CHLY AND STAB! AND SEQUE!	ONLY PRIOR TO ADERUA STABILIZE. EQUENCE OF OPERATION	
CHERCHENE NEWO 556-2-	. (REFERENCE MENO 558-2-5065 DATED 650320). PROCEDURES UNED IN FACTORY AND AT MISSILE BASES CHANGED TO REFLECT THESE REQUIREMENTS.	ED IN PACTORY AND AT	MISSILE BASES	CHAMCED	O REFLECT THESE	
AUTOPILOT-SQUARE-A/B	A-90-04-3362F -AATE GTRO-THERMOSTAT	FAR 27-45045-805	62 0603			6846 72
FAILURE HODE-OPEN-THE REDIOTE TW UG JI. FAILURE HAS CONFIRMED AND BED HIGH TENFERATURE UNIT.	FAILURE HODE-CPEN-THE REMOTE TWO-RATE STRO UNIT WAS REJECTED BURING A MAPCHE RUM FOR AN OPEN FROM FINS Z TO Y OF PL 16. 11. FAILURE MAS CONFIRMED AND TRACED TO A NOMBLLY OPEN LOW TEMP. THERMOSTAT HISTALLED IN PLACE OF AN MURMALLY CLO 18. HIGH TEMPERATURE UNIT.	CTED DURING A MAPCHE LOW TEMP. THERMOSTAT	RUN FOR AN OF	EN FRON P	INS Z TO Y OF PL AN MURNALLY CLO	
CORRECTIVE ACTION-8-C MAS BEEN A-80-04-728.	HAS BEEN INFROVED BY REV. TO EOP 330.394 PARA 8.1.1.1 TO INCLUDE A THERMOSTAT CHECK. REF.	90.394 PARA 8.1.1.1	TO INCLUDE A	INCRINOS TAT	CHECK. REF. RAR	
AUTOFILOT-SEUARE-A/B 6780 FACKAGE	A-99-04-3467-F Transformer	FAR 87-04180-3	620731 61	FACTORY YES	TES AC ELECTRONICS	884433
FAILURE MODE-ELECTRICAL SHORT. E7-41378-803). THE TRANSFORMER CITATION WOLTAGES. SINCE TRANSF AILURE COULD NOT BE DETERMINED.	THE TRANSFORMER REF FAILURE WAS DUE TO ORNER WAS SUBMITTED FAR A-89-04-3488-F	FAILED BY BURN WINDINGS THAY YSSES WITH OUT TEN ON AN IDENT	DUT MHILE NOW ME BHORT-CIRC MBSOCIATED CII FAILURE.	TED ON CI	ING OUT WHILE MOUNTED ON CIRCUIT BOARD (P/N) BECAME BHORY-CIRCUITED WHEN BUBJECTED TO EXTHE ASSOCIATED CIRCUIT BOARD THE CAUSE OF FICAL FAILURE.	
CORRECTIVE ACTION-FACT	CORRECTIVE ACTION-FACTORY PERSONNEL INFORMED OF THERE FAILURE ANALYSES. NO OTHER ACTION TAKEN.	TLURE AMALYBES. MO O	THER ACTION T.	АКЕМ.		
AUTOFILOT-SQUARE-A/B	A-98-04-3433-F DISPLACEMENT 67RO	FAR E7-4100E-003	620731 E	ETR YES	* .	
FAILURE HODE-OUT OF TOLERANCE. TO LOW AND MOULD BHOM OUT OF T	FAILURE HODE-OUT OF TOLERANCE. PITCH PROGRAM BLAVIME REPORTED OUT OF TOLERANCE. THE STROSCOPE CANNIBIER WAS CLLIBRA TED LOW AND MOULD BHOW OUT OF TOLERANCE IF WARM UP TIME WAS TOO BHORT.	ORTED OUT OF TOLERAN	CE. THE 67808	COPE CANN	STER MAS CALIBRI	
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主張したとなった。	FALLED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE ON TIM	TIME DIF	PPT VENDOR NAME OTH VENDOR PART NO	
CORECTIVE ACTION-FAIL	COPRICTIVE ACTION-FAILURE HOT CONTINED. ETR PERSONNEL MERE INFORMED OF THE AMALYSIS AND REQUESTED TO ADMERE TO SPE	A THE OWNED OF THE A	MALYBEB AND RE	eue s TED	TO ABHERE TO SPE	***************************************
CIFIED WARMUP INTIRUCTIONS. AUTOFILOT-SGUARE-A/B A GYRO PACKAGE R	A-9L-04-3377F	FAR E7-45045-5	49F LIN	LINCOLN YE	TEB MO	•••
FAILURE MODE-OUT OF SI CTED. THE REMOTE GROUP 6 F. SPEC IS 30 PLUS OF	SPECIFICATION, DURING RUN OF PROCEDURE EP-41074 A P MAS TESTED TG DETERNINE THE OPERATING TEMPERATU OR HINUS 5 DEG F. FAILURE CO.A.D NOT BE CONTINED.	OF PROCEDURE ET-41074 AN INCORRECT ALARH THERHOSTAT SETTING WAS SUSPECIOLE OFFICIAL OFFICE OF THE ALARM THERHOSTAT, IT WORKED AT 30 DE COALD NOT BE CONTINED.	ECT ALARM THER E ALARM THERMO	MOSTAT :	ETTING WAS SUSPE WORKED AT SO DE	
CORRECTIVE ACTION-NOW	CORRECTIVE ACTION-NOME, FAILURE MAS NOT CONFIRMED.					
AUTOPILOT-SAUANE-A/B	36-99-04-3423-F POLER BUPPLY	FAK 27-41330-805	£150 FAC	FACTORY YE.	YES 60/C	37.378
CORECTIVE ACTION-NOME.	E. THE FAILURE WAS NOT CONTINUED.					
AUTOFILOT-SAUME-A/B	A-99-04-3278C MRD	FAR E7-43569-1	4£0730 FAC	FACTORY TE	763 60/C	01010
FALLURE MODE-OUT OF TO M RESISTORS WERE MISSI	TOLERANCE, FAILED SUBASSEMBLY TEST, OUTPUT WAS 18YDC SHOULD BE NOT LESS THAN EG YDC. CALIBHATIO NIMG.	JUTPUT WAS 1940C SHOU	D BE NOT LESS	THAN PO	WC. CALIBRATIO	
CORRECTIVE ACTION-NOME.	ζ.					
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	97-48-04-3240F 67RO-8MED	FAR 27-41002-888	SEOTET ETH		YES 60/C	:
PAILURE MODE-FAILED TG TEM MIMUTEB AFTER APPLI	PAILURE HODE-FAILED TO OPERATE AT PRESCRIBED TIME, STRO PACKAGE WAS REJECTED WHEN BURD LIGHT DID HOT COME ON UNTIL TEM HIMUTES AFTER APPLICATION OF HISSILE POMER, SAND MODULE WAS FOUND TO BE HEAT SENSITIVE DUE TO DEFECTIVE MELD.	ACKAGE WAS REJECTED !	AEN BHRD LIGH NT BEHBITIVE D	7 010 X	OT COME ON UNTIL	<u></u>
CORRECTIVE ACTION-MOME.	·					
						
	erengy yan asalikeraksian akisini. Yangaksian pengangan adan yan asas saga sagan akispen anan kasingan	ingeligikan, opensideriyi istiliy volusiya ayasiiyi isti			ADAR SAUL	٦

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	DIFFICULTIES ARVIEW-AUTOFILOT STRICK-AIRSONE.	TOFILOT BYBIEN-AIRBO	1	•	-		-
#37878 #37874-838	TESTARFORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	11 ME DIF	A T T	PRI VENDOR MAME	
AUTOFILOT - BRUARE - A/B ETRO PACKAGE	A-BN-64-34E8-F ROLL DISPLACEMENT 67RO	FAR 87~41002-855	427	AL. 108	ž Q		:
FAILURE HODE-OUT OF TOL	TOLERANCE. MOLL DISPLACEMENT STRO GUTPUT REPORTED LOM.	PUT REPORTED LOM.					
CORRECTIVE ACTION-MOME.	CORRECTIVE ACTION-WOME. FAILURE NOT CONFIRMED.				:		
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	29-A9-04-38787	FAR 87-41002-899	420726	FACTORY	₹		****
FAILURE HODE-ELECTRICAL LURE HAS HOT CONTRHED. 1	FAILURE HODS-ELECTRICAL SHORT, GYRO CAN WAS REJECTED FROM DOCK IR WERN BLOWN FUSES INDICATED SHOPTED SPINWOTOR, FAI Lure has not compirmed, wiring error was found in Pomer Trailer used to test autopilot components at Dock 12,	DOCK IR MAEN BLOMM! AILER USED TO TEST AL	FUSES INDIC UTOPILOT CC	ATED SHOP	TEO S	FINENOTOR. FAI CK 12.	
CORRECTIVE ACTION-FACTO	CORRECTIVE ACTION-FACTORY PERSONNEL MERE INSTRUCTED TO CHECK POMER TRAILER MIRING PRIOR TO TESTING MISSILE SYSTEMS ALL THREE PHASE TRANSFORMERS IN THE GYRO CAN MERE REPLACED.	ECK POWER TRAILER MILE D.	11 MG PR 108	TO TESTIN	a X 9	SILE SYSTEMS.	
AUTOFILOT - SQUARE - A/B GTNO PACKAGE	A-99-04-3346F AMPLIFIER-TRAMBISTOR	FAR E7-41586-907	62 0725	PACTORY	7. O		******
FAILURE MODE-OUT OF TOLERAN A1 6 VOLTS, THE FAILURE WAS E TRANSISTORS TO BE MATCHED.	FAILURE MODE-OUT OF TOLERANCE. THE TORGUER AMPLIFIER WAS OUT OF SPEC. AT R. YOLTS AND 8 YOLTS WHEN IT MAS CALIBRATED AT 8 YOLTS. THE FAILURE WAS FOUND TO BE CAUSED SY A HISMATCH OF TRANSISTORS 96 AND 97. SPECIFICATION CALLS FOR THES TRANSISTORS TO BE MATCHED.	OUT OF SPEC. AT E VO TCH OF TRANSISTORS &	1.78 AND 8	KOLTS WHEN	# 50 # 0	SPEC. AT E VOLTS AND 8 VOLTS WHEN IT WAS CALIBRATED TRANSISTORS 96 AND 87. SPECIFICATION CALLS FOR THES	
CORRECTIVE ACTION-PERSO	CORRECTIVE ACTION-PERSONNEL RE-INSTRUCTED IN SELECTION PROCEDURES. FOR MAICHED TRANSISTORS.	OCEDURES. FOR MATCHE	2 TRANSIST	· 9 %			
AUTOPILOT-SAUARE-A/B GYRU PACKAGE	A-99-04-3332F CIRCUIT BOARD	FAR 27-43165-3	62072 5	PACTORY	22		80471R
PAILURE MODE-OUT OF TOLERANCE, DURING BENCH T EXMISITED A DISTORTED OUTPUT WAYE FORM AND FR . THE FAILURE INDICATION RESULTED FROM EXCESSI E OUTPUT OF THE SUBASSEMBLIES TO BE DISTORTED.	PAILURE MODE-OUT OF TOLERANCE, DURING BENCH TESTING, TWO SPIN MOTOR ROTATION DETECTOR (AMED) METWORK SUB-ASSEMBLIES EXHISITED A DISTORTED CUIPUT WAYE FORM AND PRESURNCY OF ONE WAS OUT OF SMECIFICATION, THE FAILURE WAS NOT CONFIRMED. THE FAILURE INDICATION RESULTED FROM EXCESSIVE RIPPLE ON THE FACTORY 28 YOLT DC FOMER SUPPLY, THE RIPPLE CAUSED THE CUIPUT OF THE SUBASSEMBLIES TO BE DISTORTED.	SPIN MOTOR ROTATION ME MAS OUT OF SPECIF THE FACTORY SS YOLT	DETECTOR (1 ICATION, 11 BC FOMER (HARDS METW 4E FAILURE 1UPPLY: TH	* * * * * * * * * * * * * * * * * * *	UB-ASSEMBLIES NOT CONFIRMED PLE CAUSED TH	
CORRECTIVE ACTION-THE D	CORRECTIVE ACTION-THE DEFECTIVE PACTORY 28 VDC POMER SUPPLY WAS REPLACED.	LY WAS REPLACED.					
							
						PAGE 0410	

SEMERAL DYNAHICS CONVAIR DIVISION

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	DIFFICULTIES REVIEW AUTOFILO! STRIKE-AIRBORNE	WILD! BYBIER-AIRBO	r ver	-	}			,
37.27E.m 8.08 - 87.27E.m	TEBTAREPORT HUNDER FALLED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	\$11E 71#E OIF	O TH O	VENDOR NAME	NAME ART NO	
AUTOPILOT-SQUARE-A/B	A-81.04-99899 RATE-67RO	FAR 27-45045-5	477	LINCOLN	4 C 8			•
FAILURE MODE-OUT OF TO RE WAS UNCONTENED. THE	TOLERANCE, THE REMOTE TWO- RATE STRO GROUP WAS IR/D FOR TEMPERATURE OUT OF SPEC, REPORTED FAILURE THE OF PAILURE IS DISCUSSED IN FAR A-88-04-5147F WRITTEN ON DATE SEG412. SEE ALSO ECP 1647	tour was 1870 FOR TI 1 A-88-04-5547F WRI	EMPERATURE TTEN ON DA	OUT OF BPE	EC. RE.	SPEC, REPORTED FAILU E, SEE ALSO ECP 1647	741.U	
CORRECTIVE ACTION-NO C	NO CORRECTIVE ACTION TAKEN. REF. FAR-A-88-04-3147F.	1-04-3147F.		-				
AUTOFILOT-SAUMRE-A/B STRO PACKAGE	A-86-04-3329F RATE 67RO	FAR 27-45045-5	75F #20724	BYCAMORE	ð ñ 3	J/93		***
FAILURE MODE-OUT OF TO LICATION OF MOMER AND TIREAGITY, PEAR B-323.	FAILURE MODE-OUT OF TOLERANCE, THE REMOTE RAIE GYRO GROUP WAS REPORTED AS HAVING EXCESSIVE ELAPSED TIME BETWEEN APP LICATION OF POWER AND THE GO INDICATION PROM THE BHRD. FAILURE NOT CONFIRMED. TROUBLE MAS IN MAIN GYRO CANISTER. REP IR484177, PFAR 18-325.	AS REPORTED AS HAVINGE HOUSE HOUSE HOUSE HOUSE HOUSE HOUSE HOUSE THREED.	THOUBLE WAS	IVE ELAPSEI B IN MAIN S	0 71ME 67MO C	ANI DTER	# ¥ # # # # # # # # # # # # # # # # # #	
CORRECTIVE ACTION-NOME	MONE. FAILURE OF THO RATE SYRO GROUP WAS UNCOFFIRMED.	UNCONFIRMED.						
 AUTOFILOT - SAUARE-A/B	A-99-04-3371F 6780-348D	FAR 27-41002-855	25F 420724	SCHILLIN YES	27 OF 03) / g		***
 FAILURE MODE-ELECTRICA MFIRMED FAILURE, DIBARS	FAILURE MODE-ELECTRICAL OPEN. 67RO PACKAGE MAS 1870 FOR A NO-60 INDICATION OF THE SHRD CIRCUIT. ELECTRICAL TESTS CO FIRHED PAILURE. DISASSÉMBLY SHOMED SHRD WINDING HAD AM INTERHITTENT OPEN.	VO-60 INDICATION OF ENITTENT OPEN.	THE SHED O	EIRCUET. EI	LECTRI	CAL TES	9 £	
 CORRECTIVE ACTION-NO 11	NO IMMEDIATE CORRECTIVE ACTION TAKEN AS CAUSE OF WINDING FAILURE SAS NOT DETERMINED. HOMEVER 6D/C TYME OF PROBLEM IN AN ATTEMPT TO ISOCLATE ANY WINDING DISCREPANCIES THAT MAY EXIST.	CAUSE OF WINDING FA	ILURE MAS PANCIES THE	YOT DETERM AT MAY EXI	ġ <u>;</u>	HOMEVER	3	
 AUTOFILOT-SQUARE-A/B	A-BH-D4-3484-F DISPLACEMENT STRO BOLL SIGNAL AMPL ET-41002-855 IFIER	FAR . 87-41002-859	420723	SCHILLIN NO	<u> </u>			•
 FAILURE HODE-OUT OF TO AND THE ROLL BIGHAL AND SH A-C BIGHAL APPLIED T	FAILUNE MODE-OUT OF TOLERANCE, THE AUTOFILOT GYRO WAS IR/D FOR OUT-OF-TOLERANCE FOLL SAINS, THE PACKARE WAS OFENED AND THE ROLL SIGNAL AMPLITIER (P/N ET-41378-813) REMONTO AND TESTED, THE OUT-OF-TOLERANCE FAILURE MAS CAUSED BY A HI EN A-C BIGNAL APPLIED TO THE ROLL-DISPLACEMENT ENITTER FOLLOMER DURING CHECKOUT OR TROUBLE SHOOTING.	FOR OUT-OF-TOLERAN TERTED, THE OUT-O MER DURING CHECKOU	CE ROLL SA!	INS. THE P. E FAILURE !	ACRAET MAS CA	L MAS OFT	A X X	
 CORRECTIVE ACTION-HONE RFORCE.	COMECTIVE ACTION-NOWE. INVESTIGATION OF SOURCE OF THE NIBAPPLIED VOLTAGE IS NOT POSSIBLE AS BASE IS SOLD OFF TO AL	APPLIED VOLTAGE IS	NOT POSSIBL	E AS BASE	=	A.B. 044	1 o 2	
						PA6E 0411	0411	
	والمنافزة والأفراق والمتافزة والمنافضة والمتافية والمنافضة والمنافزة والمنافزة والمنافزة والمنافزة والمنافزة والمنافزة			To Allend American State of Control of Contr				

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GENERAL BINAMICS CONVAIR DIVISION

	DITTICULTIES REVIEW-AUTOFILOT STREEM-AIRBORNE	POPILOT STREM-AIRBON	¥		
231-01-0-10-0-10-0-10-0-10-0-10-0-10-0-1	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE	VEHICLE \$17E	PRI VENDOR NAME	
AUTOFILOT-SBUARE-A/B	A-BH-G4-SSETF AMPLIFIER-TRANSISTOR	FAR E7-45E02	GROTIS SCHILLIN TES	TEB	•
FAILURE MODE-FAIL DURINE 13 FOUND DEFECTIVE TOROUE RMEN II CRACKED AND TRANS BLEM EMPERIENCED MITH END:	FAILUME WODE-FAIL DURING OPERATION, GVRO PACKAGE FAILED TO MULL AFTER SUCCFRSFUL COMPLETION OF TEST, FAILUME AMALTS TA FOUND DEFECTIVE TOROUGE AMPLIFIERS IN FITCH AND YAW CHAMMELS. EMMITTER RESISTONS RIS AND REO WERE BURNED, TRANSFO RHEN II CRACKED AND TRANSISTOR AS HAD A BURNED COLLECTOR LEAG. THESE ARE TYPICAL SYMPTONS OF THE THERMAL RUMANAY PRO BLEN EXPEASENCED WITH RHUSS TRANSISTOR USED IN THIS CIRCUIT.	O MULL AFTER SUCCESSE! MMELS: EMMITTER MESSS: EAG: THESE ARE TYPICAL T.	AL COMPLETION OF Y TONS BIS AND REG W BYMFTONS OF THE	181. FAILUME AMALTS 186 BURNED, TRANSFO 14ERMAL RUNAMAT PRO	
COMMECTIVE ACTION-TORNIGE EVICE.	COMECLIVE ACTION-TORGUES ANTIFIER MAS REDESIGNED THE ENSISY TRANSISTON WAS REPLACED BY THE EMASS. A HIGHER RATED	PRANCES EN PREP	LACED BY THE ENGDE	. A MSCHER RATED D	
AUTOFILOT-SQUAFE-A/B GTNO PACNASE	A-2P-04-338RF 67RO-34R0	FAR ET-4100£-855	ROTES PLATTED NO	NO 60/C	101506
FALLURE HODG-FAIL TO OPER AS FOLND BURNED OPEN, ALSO OVERED IN REL &C-44-OES AND	OPERATE. THE ROLL-RATE GTRO HAD NO SHED GUTPUT. THE CANTSTER WAS OPENED AND THE SHED WINDING ALSO DICCES OR AND CRE AND TRANSISTOR BI MERE DANAGED. THESE PAILURES ANE SIMILIAR TO THOSE AS AND COXED ONLY MANE BEEN CAUSED BY IMPROPER VOLTAGE APPLICATION TO THE SHAD CINCUIT.	RD CUTPUT. THE CANISTI N 01 WERE DANAGED. THE IMPROPER VOLTAGE APPLI	TR WAS OPENED AND SEE FAILURES AND CATTON TO THE SAND	HE SHED WINDING W HILLAR TO THOSE C CINCULT.	
CORRECTIVE ACTION-4D/C INC	CORRECTIVE ACTION-GD/C INFORMED ALL PERSONNEL HANNING SYROS OF THE EXTREME CAUTION TO BE ENERCISED WHEN OPERATING	33 OF THE EXTREME CAUT	ION TO BE EVENCINE	D WHEN OPERATING	
FOUNDATION - SAUMRE - A/B A GINO PACKAGE D	A-9N-04-3402F BI 3PLACEMENT GYRO	FAR 1.	16F SAFB Y	YES 40/C	997709
FAILURE MOCEREPORTED OUT OF	OUT OF TOLERANCE, SPIN MOTOR ROTATION DETECTOR SHAD NO-GO MAS RECEIVED ON CAND 303 OF MAPCHE THIS DID NOT CONTIAN FAILURE, PROBLEM COULD BE IN RATE GYRO GROUP OF SHAD.	ROTATION DETECTOR SHED NO-GO MAS RECEIVED ON PROBLEM COULD BE IN RATE GYRO GROUP OF SHED.	MS RECEIVED ON CAI	ID 303 OF MAPCHE	
8	CARECTIVE ACTION INS TAKEN BECAUSE PAILURE HAS UNCONFIRMED.	LURE MAIN UNCOMPTRIED.			
AUTOFILOT-BOLARE-A/B A- FTRO PACKAGE DI	A-AB-DA-BALIF DISPLACEMENT GYRO	FAR 845 27-41002-859 620	MACTORY HO		*** *********************************
FAILUME MODE-FAILED TO OPER. KOUT. PROBLEM TRACED TO A ST	OPCRATE AT PRESCRIBED TIME, YAW DISPLACEMENT GYRO NO-60 INDICATION DURING FINAL PACTORY CHEC A STICKING RELAY IN THE AGG CHASSIG OF THE MAPCHE TRAILER.	ACENENT GYRO NO-GO 1M F THE MAPCHE TRAILER.	NEATION DURING FI	MAL PACTORY CHEC	
CORRECTIVE ACTION-MONE.					
				PAGE DALP	

SEMERAL MMICE CONVAIR .. VIBION

SYSTEN SUB-BYSTEN	TEST/REPORT MUMBER FAILED COMPOMENT MAME	DIF GATA BOUNCE PART HUMBER	VEHICLE DATE DIF	11 ME DIF	OTH VENDOR PART NO	Ω
AUTOFILOF-SOURE-A/B	SP-80-04-381RF RATE STRO	FAR R7-41703-609	1100	# 55A	22	•
FAILUME MODE-MOME, REMOTE B' ILEB. BEE FAR A-50-04-3317F.	RENOTE BYRO CANIATER RENOVED BECAUSE IT WAS A MATCHED BET TO THE MAIN GYRO CANIATER WHICH HAD FA M-3317F.	T MAS A MATCHED BET	TO THE MAIN	GYRO CAN	ISTER WHICH HAD	<u> </u>
CORRECTIVE ACTION-NOME.	E. THEKE WAS NO FAILURE.					
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-5N-04-340R-F 6TRO-14RD	FAR ET-4100E-855	105	BHILLING YES	7E8 40/C	26.56.5
FAILURE HODE-FAIL DUR!	DURING OPERATION. A NO-GO INDICATION WAS RECEIVED FROM THE SPIN MOTOR ROTATION DETECTOR DURING A	s necesved from the	BPIN NOTOR	NOTAT1 ON	DETECTOR DURING	
CORRECTIVE ACTION-WON	CORRECTIVE ACTION-NOME. FAILURE NOT CONFIRMED.					
AUTOFILOT-SCUARE-A/B	A-90-04-3441-F HEATER	FAR E7-4100E-655	71-6	DYESS	YES NO	*****
FAILURE MODE-OUT OF TO DEGUATE MARMUP TIME BEI	TOLERANCE, REPORTED OUT OF TOLERANCE WITH RESPECT TO PINE MEATER VOLTAGE. PAILURE CAUSED ST INA BEING CALLED OUT IN TEST PROCEDURE.	WITH RESPECT TO PINE	HEATER VOI	.TAGE. FA!	LUME CAUSED BY 1	
CORRECTIVE ACTION-PROC	CORRECTIVE ACTION-PROCEDURE 27-41044-1 MAS CHAMÉED TO ALLOM ADEQUATE WARMUP TIME.	ON ADEQUATE WARMUP 1	1×C.			
AUTOFILOT-SQUARE-A/B SYRO PACRAGE	A-89-04-3550C TRAMSFORMER	FAR	4E071R	FACTORY	YES A.C.ELECTRIC NO ACSESS	
FAILURE MODE-FAIL DUR! E THE PART MAS NOT REGI	DURING OPERATION. THE TRANSFORMER FAILED DURING BENCH TEST, FAILURE AMLYSIS WAS CANCELLED BECAUS RECE'VED. THE TRANSFORMER WAS BCRAPPED.	D DURING BENCH TEST	FAILURE AL	MLYBIB M	B CAMCELLED BECA	•
CORRECTIVE ACTION-NOME.						
AUTOPILOT-SQUARE-A/B	A-09-04-3209-F RATE 6780, 8980	FAR 87-64574-\$	4 0711	FACTORY	YES HINN-HOMEYLELL NO URSTOIAR	
- L	' TOLERANCE. SPIN-MOTOR ROTATION-DETECTOR (SMRD) OUTPUT WAS LESS THAN THE D.S-VOLT PEAK RESUIRED. Tions of the smrd mashet.	OR (SHRD) OUTPUT NA.	. LESS THAN	THE 0.8-V	OLT PEAR REQUIRE	
					PAGE DA13	1-

GENERAL DYNAHICS CONVAIR DIVISION

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	DIFFICULTIES REVIEW-AUTOFILOT STRIEM-AIRBORNE	TOFILOT SYSTEM-41950	¥				
 8787EN 818-818	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	TIME DIF OTH		VENDOR MANE	
CORRECTIVE ACTION-60/CONVAIR INFORMED ALL OPERATING 67ROS. WILL CONTINUE TO MONITOR	CORRECTIVE ACTION-60/CONVAIR INFORMED ALL PERSONNEL HANDLING GYROS OF PRECAUTIONS TO BE TAKEN WHEN TROUBLE SMOCTING OPERATING SYROS, WILL CONTINUE TO MONITOR THE PROBLEM IN AN EFFORT TO DETERMINE CORRECTIVE ACTION TO BE TAKEN.	ING GYROS OF PRECAUT	PRECAUTIONS TO BE TAKEN WHEN TROUBLE SHO DETERNINE CORRECTIVE ACTION TO BE TAKEN.	TAKEN ME	* of	NBLE SHOCTING E TAKEN.	
AUTOFILOT-SQUARE-A/B	A-61-04-334F AWLIFIER-0100E	FAR 27-4100%-885	\$2 0711	LINCOLN	40 K	ar variation de la company de la company de la company de la company de la company de la company de la company	*****
FAILURE MODE-ELECTRIC ITCH SIGMAL AMPLIFIER	FAILURE MODE-ELECTRICAL SHORT. 6YRO PACRAGE FAILED DUE TO NO TORGUING GAIN, FAILURE ANALYSIS CONFIRMED FAILURE TO ITCH SIGMAL ANTLIFIER UNICH MAD SHORT-CIRCUITED ZENER DIODES CR3 AND CR4 (SV-11 OR IN 765).	NO TORGUING GAIN. F.	ALURE AMAL	rs18 com	I SHED	FAILURE TO P	
CORRECTIVE ACTION-LAKINGAN.	MOMM. 39-98-04-3254F	**************************************	620710	ETA		TEXAS INSTRUME	696375
STRO PECKAGE	AMPLIFTER BLODE	ET-41002-899	to.	-	g g	Ŧ	
FAILURE HODE-OFEN-ELE 8 ISOLATED TO AN OFEN I NT.	FAILURE MODE-OFEN-ELECTRICAL, MAIN GYRO CAN WAS REJECTED WHEN VERNIER ENGINES CHANGED POSITION SUDDÉMIT. FAILURE MA 8 1801.ATED TO AN OFEN DIQDE CRS IN THE MOLL BIRNAL AMPLIFIER, DICOE (858C4-TEXAS INSTRUMENTS) HAD DEFECTIVE MELD JOI MI.	WHEN VERNIER ENGINES ER. DICOE (853C4-TEX	CHANGED PO	TEI HAD G	DEFE	T. FAILURE WA	·
CORRECTIVE ACTION-TEX DIME.	CORRECTIVE ACTION-TEXAS INSTRUMENTS REDESIGNED LEAD FORNING MACHING AND INSTITUTED 100 PERCENT INSTELLTION ATTER MELITIME.	NG MACHINE AND INSTI	1001 03151 1001 03151	אנבאו זא		10 AT 155 AC.	
AUTOFILOT-SQUARE-A/B	A-84-04-3348F AMPLIFIER-010DE	FAR 27-41002-811	33F 620706	SCHILLIN WO	9 9		70 7500
FAILURE MODE-SHORTED. R4 MERE FOUND SHORTED. HIS HIGH VOLTAGE MAS A	FAILURE MODE-BHORTED. 6780 CANIBIEZ WAS IR/D AS MAVING A SMORTED ROLL AMPLIFIER OUTPUT. DIODES CRI, CRE, CRS, AND RA WERE FOUND SHORTED. A HIGH VOLTAGE MUST MAVE BEEN APPLIED ACROSS THE ZEMER DIODES DESIGNED TO CLIP AT 14 VYLTS. HIS HIGH VOLTAGE MAS APPLIED FROM A POINT EXTERNAL TO CANIBIER.	BHOTED ROLL AMPLIFTED ACROSED THE ZEHER !	IR OUTPUT. (2100ES CR.	5	E, CR3, AND C T 54 W., T9, T	
CORRECTIVE ACTION-NO CORRECTIVE ACTION.	COLLECTIVE ACTION.						
AUTOFILOT-SAUARE-A/B STRO PACRASE	HG-89-04-3485-F TEMPERATURE CONTROL AMPLIFIERS	FAR 40-0760-081	460707	FACTORY	20	MAGNETIC CONTR OLB TCTC=1	
FAILURE MODE-FAIL DURI UE TO BURNING OF ALL 3 PECT EXCESSIVE INPUT OR	LRIMG OPERATION. TEMPERATURE CONTROL AMPLIFIERS FOR PITCH ROLL AND YAW FAILED DURING OPERATION D 3 AMPLIFIERS. CAUSE OF FAILURE NOT DETERMINED DUE 10 PARTIAL DESTRUCTION DURING DE-POTTIMG. SUS OR OUTPUT CHREWIT.	MPLIFIERS FOR PITCH (TERHINED DUE 10 PART	IOLL AND YA!	FAILED	200	& OPERATION D	

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GENERAL DYNAMICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE

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VENDOR PART NO	OBLEH OF PAILEL	3/09	OUTPUT TRANSFORMERS M SUPPLY MAS CRACKED. D TIVE ACTION MAS TAKEN		PROM 35 DEGREES TO ZENER DIODE LIMITIM	45 DEWELL IN		SCHILLIM YES REARFOTT	TION REVEALED &	7-04250-803.	YES KEARFOTT MO	ONAL TESTS INDI RAECT CRITERIA	(PASE 0415
9 T	ñ	33	7 4 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	e 8	F S S S S S S S S S S S S S S S S S S S	2		ž Š	\$ E.	ģ	, O	2 C 2 T	
\$1.7E 11.9C 01	FA 11 NG TO	ALTUB	POLEN OF	1.0 P.US 10	10 JUNE			SCHILLI	THE INVEST	NEW PART	FACTORY	ALYBIA P	
VEHICLE SITE DATE DIF TIME DIF	I INVESTI	620707	THE GYRO THE GYRO THE GYRO NO OTHER	1430	TPUT AND	SALY.		4e 0705	THE BEAR	WOCH A	42 070 8	TILUME AN	
DIF DATA BOUNCE PART NUMBER	C AND THE VENDOR AND	FAR 27-41002-855	YRO DAMACE, ROLL TO LED AND THE CHOKE IN JIPHENT, BEE IRBEADO!	COMPOSITE-J PACT E7-41370-013	ILED CAUSING VERNIES	VERNICA EMENES JOH ID HOT REPEAT THIS AL		FAR ET-41002-635	CHE. NO-GO ON SHED (EING PURNIBHED 60/C	FAR 7-04850-3	H HOTOR BEARTHAS. FI	
TEAT/NEPORT NUMBER FAILED COMPONENT NAME	FOR THIS SPECIFIC UNIT, HOMEVER, GO/C AND THE VENDOR ARE INVESTIGATING THE PROBLEH OF PAILEL.	4-6H-04-128557	46 CPERATION, MAPCHE TEST INDICATED 6780 DAMAGE, ROLL TORSUER AMPLIFIER OUTPUT TRANSFORMERS M TRANSFORMER IN TAN TORSUER WAS CRACKED AND THE CHOKE IN THE 6780 POWER SUPPLY MAS CRACKED. D MIRING ERROR FOUND IN ALTUS TEST EQUIPMENT, SEE IRSEADOS. EBUIFMENT MIRING ERROR MAS CORRECTED BY SASE PERCOMMEL, NO OTHER CORRECTIVE ACTION WAS TAKEN	P2-4CO-03-145 AMPLIFIER-DIODE	ME OPERATION FOLL BIGMAL AMPLIFICE FALLED CAUSING VERNIER EMGRAES TO JUMP B SECONDS. LAS TEST INDICATED HIGH ROLL GYRO AMPLIFIER OUTPUT AND LOSS OF	SYSTEM EFFECT-ERRATIC OPERATION. AT 7 PLUS 18 SECONDS FOTH WRNICH ENGINES JUMPED FROM 33 DEGREES TO 45 DEVREES IN A CLOCKNISE ROLL DIRECTION. WINE RUNS MADE AFTER THE TEST DID NOT REPEAT THIS ANOMALY. VEHICLE EFFECT-MONE.	CORRECTIVE ACTION-REPLACED GYNO CANIBTER, REF. SRBTOADB	A-OH-D4-33E3F PITCH-DIBPLACEHENT GYRO BEARING	FAILURE MODF-FAIL DURING OFERATION, GYRO PACKAGE FAILED NAFCHE. NO-GO ON SNED CIRCUIT, THE INVESTIGATION REVEALED PIN-MOTOR BEARING LUBRICANT HAD DRIED IN ONE BEARING, CAUSING EXCESSIVE WEAR OF THE BEARING RACE.	COPRECTIVE ACTION-GYROSCOPES OF A MODIFIED DESIGN ARE NOW BEING FURNISHED 60/C UNDER A NEW PART NO. 7-04250-803.	A-00-D4-2810F D16PLACEMENT 67RO NOTOR	L. THE REPORTED PAILURE WAS NOISY SPIN HOTOR BEAR!WAS. FAILURE ANALYSIS FUNCTIONAL TESTS INDI SPOT (N THE 3PIN HOTOR BEARING ALTHOUGH SPIN HOTOR PERFORMANCE AS JUDGED BY CORRECT CRITERIA	
STRTEH SUB-STEH	CORRECTIVE ACTION-NOYE P	AUTOFILOT-NAUMRE-AZB	FAILURE MODE-FAIL DURING THE CRACKED, ONE OUTPUT AMAGE MAS ATTRIBUTED TO CORRECTIVE ACTION-TEST	AUTOFILOT-SQUARE-A/B 67RO PECKACE	FAILURE MODE-FAIL DURIN 4s DEGREES IN ROLL AT 18 6.	SYSTEM EFFECT-ERRATIC O A CLOCKMISE MOLL DIRECTI VEHICLE EFFECT-MONE.	CORRECTIVE ACTION-REPLA	AUTOFILOT-SAUME-A/B GYRO PACKAGE	FAILURE HOF-FAIL DURING PIN-MOTOR BEARING LUBRIC	COPRECTIVE ACTION-GYROS	AUTOFILOT-BRUNE-A/B FTRO PACRACE	FAILURE MODE-STRUCTURAL CATED A POSSIBLE ROUGH S	

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مقتت فقاري ووروز مستبقة فتأوين ومديد منيه متقافا إجويته فيالقاه بريجون ويطرفواه بأديدي فاسهافا إيوين		PART NUMBER	DATE DIF TIME	TIME DIF OTH VENDOR PART NO	
MAS ENTIRELY ACCEPTABLE FILL SCREW.	ABLY. THE STRO, IN SEMERAL, SHOWED ONLY NORMAL MEAR WITH THE EKCEPTION OF SOME LEAKASE AROUND THE	MET HORMAL MEAR WITH TH	E EKCEPTION OF 1	ONE LEAKAGE AROUND THE	*******
CORRECTIVE ACTION-FAIL! 678.05 843.ED ON NOISE. I OR INE FILL SCREW INSTAI	FAILURE NOT COMFIRMED, FACTORY PERSONNEL NERE INFORMED THAT THERE IS NO CRITERIA FOR REJECTION OF SE, REARFOTT GUALITY COMTROL MAS INFORMED OF THE LEARING FILL SCREW. THEY WERE RESUESTED TO MONIT INSTALLATION AND SEALING PROCEDURE AND TO IMPROVE QUALITY CONTROL IN THIS AREA.	NAMEL MERE INFORMED THAT ORMED OF THE LEAKING FI ID TO IMPROVE QUALITY CO	THERE IS NO CRI	TERIA FOR REJECTION OF ERE REQUESTED TO MONIT IEA.	
AUTOFILGT-SQUARE-A/B	A-99-04-3894F 67RO, DISPLACEDENT	FAR 7-04£50-1	REGTOS FACTORY	MY YES KEAKPOTT HO	*****
FAILURE MODE-OUT OF TO	OF TOLENAMCE. CYRO HAD HIGH BENBITIVITY DURING BENCH TEST. DISCREPANCY WAS NOT CONFIRMED DURING FA	TY DURING BENCH TEST. D	I BCREPANCY WAS !	IOT CONTINUED DURING FA	·
CORRECTIVE ACTION-NOME	COMPECTIVE ACTION-MONE-FAILURE NOT CONFIRMED.	,			
AUTOF ILOT-SQUARE-AZB GTRO PACKAGE	A-99-04-3412-F 67R06COPE-DISPLACEMENT	7AR 7-04850-4	420TOS FACTORY	MY YES KEARFOTT NO C-TG-ESGS-GGG	******
FALURE MODE-FAIL DURIN	DUBLING OPERATION. FAILURE DUE TO DETERIORATION OF SPIN NOTOR BEARING LUBRICANT.	ENIORATION OF BAIN HOTO	R BUARTHE LUBRIC	.AMT .	
CORRECTIVE ACTION-NOME	CORRECTIVE ACTION-NOME-KEARFOIT MORKING TO INFROME BEARING LIFE.	RING LIFE.			
AUTOFILOT-SQUARE-A/B	A-90-C1-3340F RELAY	FAR RY-4100R-855	53F DYESS	22	82772R
FAILURE ACDE-OUT OF TOLERAN ED RELAY LOCATED IN THE NAG. HALYBIS OF THE FAILED MELAY.	FAILURE NODE-OUT OF TOLERANCE-GYNO PACKAGE HAD INDICATED INCORNECT GYNO TEMERATURE. THE FAULT WAS TRACED TO A FAIL ED RELAY LOCATED IN THE NAG. AMP. TEMP. CONTROLLER VOLTAGE BUPPLY CIRCUIT. REPORT A-94-48-074P CONTAINS A COMPLETE A HALYSIS OF THE FAILED RELAY.	ED INCORRECT GYRO TENTE AGE BUPPLY CIRCUIT, REP	RATURE, THE FAU ORT A-99-48-0741	T MAS TRACED TO A FAIL CONTAINS A COMPLETE A	
CORRECTIVE ACTION-NOME-BECONDARY PAILUME.	-SECONDARY FAILURE.				
AUTOFILOT SQUARE-A/B	A-64-04-3330F RATE 6780	FAR 27-45045-5	55F DYESS	TES	
FAILURE MODE-PAIL DURIT ATERS. SPERATIONAL THE	DURING OPERATION, THE RENOTE TWO-RATE GYRO GROUP WAS IR/D FOR NO APPARANT OUTPUT FROM THE GYRO HE TIME AT FAILURE MAS \$66.E HOURS, FAILURE MAS NOT CONFIRMED. TROUBLE MAS FOUND IN MAIN AUTOFILOT C	E SYRO SROUP WAS IR/D P.	OR NO APPARANT (TROUBLE MAS FOR	MUTPUT FROM THE GYRO HE AND IN WAIN AUTOFILOT C	-

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GENERAL MANICE

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBCANE

276740 *87507 883EF3 11 0944 FAILURE MODE-SMORT (ELECTRICAL)-DURING ELECTRICAL ACCEPTANCE TENTS THE YAM GUIDANCE BLAVING BENSITIVITY MAS SO PER CENT BELOM MOMINAL. INDUCTOR LI MAS POUND TO MAYE A COMBIDERABLE MUNDER OF SMORTED TURNS DUE TO BREAKDOMM OF THE INS GLATIME COMTING ON THE WINDINGS. FAILURE HODE-FAILED DURING OMERATION, ELAPSED TIME INDICATOR FAILED TO INDICATE, IEITH OF BRASS BPUR GEAR WERE FOUND DANNIED. DANNIE HAS ATTRIBUTED TO BUILD UP OF TOLERANCES CAUSING BINDING OF MECHANISM. VEHICLE SITE PRI VENDOR NAME FAILURE MODE-OUT OF TOLERANCE. GYRO PACKAGE MAS REJECTED, ROLL TORGUING MAS SUSPECTED AS BEING OUT OF TOLERANCE, A Check revealed no discrepancies, also a modified proof was comducted with no discrepancies. YES EUZE \$20700 STCAMORE TES CORRECTIVE ACTION-MONE. THE VENDOR IS OUT OF BUSINESS NO NO CORRECTIVE ACTION COULD HE OBTAINED, FACTORY \$20630 LINCOLN CORRECTIVE ACTION-PERSONNEL AT LINCOLM APS NERE INFORMED OF THE RESULTS OF THIS AMLYSIS. 1130 DIF DATA SOURCE PART NUMBER FAR 27-41653-633 FAR E7-4100E-855 E7-4100E-635 A-BO-DA-3263F CLOCK: BLAPSKB TIME INDICATOR TESTAREPORT HUNGER FAILED COMPONENT NAME COMPECTIVE ACTION-NOWE-FAILURE MAS NOT CONFINHED. H6-88-04-3318F Ahrlifier A-91-04-3325F GYRO CORRECTIVE ACTION-UNKNOWN. ALTOFILOT-SQUARE-AZE STRO PACKAGE AUTOFILOT-SQUARE-A/B GUB-STRIEN AUTOPILOT-SQUARE-A/S AUTOFILOT-SQUARE-A/B 8787EH STRO PACKAGE GYRO PACKAGE

9 ₽ 31 F FAR E7-4100E-035 4-84-84-8318F DISPLACEMENT GYRO

183485

FAILURE MODE-FAIL DURING OPERATION-NO 40 MAS FOUND ON CARD 321 DURING MAPCHE PROCEDURE 27-88451-503 INDICATING A FA ILURE OF THE FITCH DISPLACEMENT 6780 TO MULL, FAILURE COULD NOT BE CONFIRMED. ALSO SERVONMELIFIER CANISTER WAS IR/D (IR 878307) AND FAILURE IN THE V-2 PITCH CHANNEL OF THE BERNO CANISTER WAS CONFIRMED.

CORRECTIVE ACTION-MONE AS THE REPORTED PAILURE MAS UNCONFIRMED.

PAGE 0417

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SENERAL DYNAHICA CONVAIR DIVIBION

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	PATLED COMPONENT NAME	PANT MUMBER	VEHICLE 3A VE DIF	VEHICLE SITE	PRI VENDOR	7
AUTOPILOT-BOUNE-A/A	A-98-04-3411F RATE GYRO HOTOR	FAB R7-QAS74-3	******	FACTORY	TES MINN-HOWETWELL NO JR4101AE	THELL 097235
FATLURE MODE-OMEN-ELE B TO C MERE REPORTED.	FAILURE HODE-OFEN-ELECTRICAL. THE RATE STROSCOPE FAILED DURING NANIFACTURING TESTING WHEN AN OPEN CIRCUIT FROM PINS B to c were reported. Failure analthis found open circuit in phase B of the BPIN Hoton Winding.	DURING MANUFACTURING	TESTING WHE	N AN OPEN INDING	CIRCUIT FROM	ž
	NO CORRECTIVE ACTION MAS POSSIBLE SINCE THE ACTUAL CAUSE OF THE FAILURE WAS NOT DETERMINED.	E THE ACTUAL CAUSE OF	THE FAILUR	E 144 HOT	DETERMINED.	
AUTOPILOT-BRIMRE-A/B GYRO PACKAGE	A-88-04-3411F 67806C0FC-RATE	FAR RT-04574-3	4206k*	FACTORY	YES HINNEAPOLIS HO NO NETHELL	8 HO 884274
FAILURE MODE-OFEN (ELF.)	IRECTRICAL). PHASE B WINDING OF SPIN NOTOR FAILED OFFH.	MOTOR FALLED OPFH.			48-101-8K	
	CAUSE OF DEFENIED.	MINED.				
AUTOFILOT-MELARE-A/B 67RO PACKACE	4-89-04-3370F 67RO-08FL, MEATER	7-04E30-8	62 0627	FACTURY	TES KEARFOTT HO	•
FAILURE MCDE-ERRATIC OF MEATER. FUNCTIONAL TEST B DISASSEMBLY MAS DOME.	'C OPERATION. THE DIAPLACDENT GTRO WAS IR/D WHEN ELECTRICAL TESTING REVEALED AN OSCILLATING FINE TESTING DID NOT CONFIRM THE REPARTED FAILURE. SINCE EYR? HET ALL REGUISITE PARAMETERS, NO FURTHE NE.	I IRZO WHEN ELECTRICAL Allume, BINCE FYRONET	TESTING RE	VEALED AN SITE PARA	OSCILLATING	ÄÄ
. 1	ACTORY PERSONNEL ADVISED TO TEST DATA ON GTRO FINE HEATERS BEFORE REJECTING THEM.	ON GTRO FINE HEATERS B	EFORE REJE	718MG 7MG	ڍ	
AUTOFILOT-SQUARE-A/B GTNO PACKAGE	A-19-04-3283F Frio, Displacement	FAN 87-04250-3	\$20827 F	FACTORY YI	YES KEARFOLT	*1010
FAILURE MODE-BYRUCTURAL, FIFTEEN OH FOR DISTORTED LEADS MOT FOUND,	FAILURE MODE-BYRUCTURAL. FIFTEEN GYROB WERE REJECTED FOR HIGH DRIPT. DRIFT ATTRIBUTED TO DISTORTED FLEX LEADS. REAS	4164 DRIPT, DRIFT ATTR	BUTED TO D	18708720	PLEX LEADS. M	3
CORRECTIVE ACTION-BAPFLE	FFLES WERE INCORPORATED INTO 67808 TO PROTECT FLEX LISADS FROM FLEW OF FLOTATION FILLING	PROTECT FLEE LISADS FRO	8	FLOTA 7 COA		**************************************
AUTOPILOT - BEUARE - A/B GYRO PACKASE	4F-06-04-1331F 9at 6730	FAR 27-417031-809	GEOGER ETR	TES		1
PAILURE MODE-PAIL DURING	FAILURE MODE-FAIL DURING OPERATION. THE REMOTE SATE 6780 GROUP MAN 18-0 METALING	ROUP WAS 1870 APCAURE	,			 -

GENERAL DYNAMICS CONVAIR DIVISION

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CONVAIR DIVISION

9841 WAT 11	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	DPILOT BYBTEM-AIRBOR	*				
SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER ; FAILED COMPONENT NAME	DIF DATA SOUNCE	VEHICLE NITE DATE DIE TIME DIF	11 NE DIF	E E	OTH YENDOR PART NO	
ER AND GYRO PAILED TO BHO CORECTIVE ACTION-NOME-F	R AND GYRO FAILED TO BHOM ANY IRREGULARITY. CORRECTIVE ACTION-NOME-FAILURE COMED NOT BE COMFIRMED.	·		:			
STROPELOT-SQUARE-A/B GYRO PACKASE FAILURE HODE-OUT OF SPEC SHOWED PITCH RATE TORGUIN ZRHED IN THE TWO RATE GRO	UTOPILOT-SQUARE-A/B A-9L-04-3E41-F FAR 8ED625 LINCOLN YES 6D/C RYRO PACKASE 6YRO PACKASE 6YRO NO FARCASE 6YRO NO FARCASE FARCASE NO FAILURE MOSE OF SACKAGES WERE REJECTED WHEN MAPCHE P-1 TEST SHOULD RATE GRADING GAIN GUT OF SPEC. ROLL RATE 6YRO IN MAIN PACKAGE PAILED AT SAME TIME, WO FAILURE WAS COMPINED IN THE TWO RATE GROUP, DOCUMENTATION OF AMALTSIS OF MAIN 6'RO CAN WAS NOT FOUND.	FAR ET-15045-5 MD MAIN GYRO PACKAGE IN MAIN PACKAGE PAIN AIN GYRO CAN WAS MOT	AED623 L'ER REJ ED AT BAH FOUND.	ECTED IN	YES ON PARTY OF PARTY	60/C PCHE P-1 TEST ILURE MAS COMF	
CORPECTIVE ACTION-LYKINOMS.	ž						
AUTOFILOT - SQUARE-A/B	A-99-04-3306F RATE 67RO 34KD	F1R R7-04574-3	*20622	PACTORY	T Q	YES HONEYMELL NO JRSIGIAZ	007380
FAILURE MOSE-OUT OF TOLE ME SMRD MASMET. CORRECTIVE ACTION-SWRD M	TOLENANCE. BFIN NOTOR RUTATION DETECTOR PULSES WERE LUN. PROBLEM TRACED TO DEMANSETIZATION OF WIGH MACKET HAS REMANETIZED BY A YENDOR APPROVED PROCEDURE.	R PULSES WERE LOW, P.	HOBLEH TRA	Of 0	DAG	7112A11ON OF 1	
AUTOPILOT-SQUARE-A/B	A-98-04-3443-F , 12P.ACDMENT 6YBO	FAR 7-04250-3	620622	FACTORY	5 3	KEARFOTT CTD-2504-000	## \$40.3E
PAILURE MODE-ERRATIC OPE S, THIS KAS NOT CONFIRMED CORRECTIVE ACTION-MOME.	FAILURE MODE-ERRATIC OPERATION. THE INTERNAL BENSING ELEMENT SHOKED INTERMITTET DURING TEST, DURING FAILURE AMALYSI, THIS KAS NOT CONFIRMED, MOKEVER THE FINE MEATER VOLTAGE WAS ERRATIC. CORRECTIVE ACTION-MOME, THE REPORTED FAILURE COULD NOT BE CONFIRMED AND THE CAUSE OF THE ERRATIC VOLTAGE COULD NOT	NT SHOKED INTERMITTE MAS ERRATIC. CONTIRMED AND THE CA	T BURENG T	EST. DUM	VOLT	LILURE AMALYSI NEE COLLD NOT	
BE DETERMINED. AUTOFILOT-BEUARE-A/B EVRO PACKAGE	8F-80-04-3374F RATE 6YRO MICROSYN POTENTIONETER	FAR E7-41002-903	1200	#74	ž 3		•
FAILUME HODE-ELECTRIC:L Meaburements revered an	FAILLME MODE-ELECTRICIL OPEN. GYRO IR/D DUE TO NO YAN-RATE GYRO OUTPUT WAEN A RATE INPUT MAS INTRODUCED. RESISTANCE Measurements revealed an open circuit in the signal generator microsyn resolver.	STRO OUTPUT WERN A TOR MEROSTN RESOLVE	RAYE 3MPUT	Ĭ.	DO OC	ID. RESISTANCE	
						PAGE DAID	

CENERAL DYNAMICS

E II LA LA	TEST/REPORT NINGER	DIF DATA SOURCE	VEHICLE	3116	VEHICLE SITE PRI VENDOR NAME	
**************************************	FAILED COMPOSENT MANE	TART MUNGER	UA IE UI			-1-
CORRECTIVE ACTION-VER	HOOR (MINN,-HONEYNELL) OF 8-1082-1 DATED OCT, 1982.	STRO UNITORAS IMPROVED HIS QUALITY CONTROL PROCEDURES. REF MINNEAPOLI	ITY CONTRO	L FROCEDUR	CS. REF HIMEAP	5
STRO PACHAGE	A-AS-DA-SRRI-F RATE GTRO SARD	FAR E7-4500K-855	039038	FACTORY	YES ASTRONAUTICS NO ZT-4100Z-835	
FAILURE MODE-FAIL TO OR (SARD) COULD BE CO	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. DURING AUTOPILOT TESTS NO OUT PUT FROM EPIN- MOTOR ROTATION-DETECT OR (SHRD) COULD BE OBSERVED, FAILURE DUE TO A DEMANATIZED SHRD MACHET IN 'HE ROLL RATE GTRO.	NG AUTOPILOT TERTS NO OU 12ED RMED MAGNET IN 'HE	PUT FROM	EPIN- MOT GYRO.	OR ROTATION-DETE	ţ.
CORNECTIVE ACTION-NOME.).	A PARA PROPERTY AND PROPERTY AN	Section of the sectio	-		1
AUTOPILOT-SQUARE-A/B	A-BL-D4-3240F GYRO-THERMOSTAT	FAR 27-43045-5	029039	LINCOLN	YES 60/C NO	******
FAILURE MODE- GUT OF HOLD WITH LIGUID NITH D TO LAG TEMPERATURE (FAILURE MODE- GIT OF TCLEMANCE. TWO RATE PACKAGE TEMPERATURE FAIL BIGMALD CAME ON FOR 1.5 MINUTED DURING AG MINUTE MOLD WITH LIGUID MITROGEN ON BOARD, FAILURE MAS ATTRIBUTED TO INCORRECT SPEC FOR INERMOSTAT SETTING, HEATER WAS FOUN D TO LAG TEMPERATURE CHAMBE.	ERATURE PAIL BIGNALB CAH UTED TO INCORRECT SPEC F	E ON FOR 1	S MINUTES TAT BETTIN	ON FOR 5.5 HINUTES DURING 40 HINUTE 1 HERNOBTAL BETTING, HEATER MAS FOU	 §
CORRECTIVE ACTION-TH	CORRECTIVE ACTION-THERMOSTAT SETTING MAS CHANGED, REF ECP 1687.	ECP 1887.	,		ese allementatives describinistics and includes a security of the security of	-1
AUTOPILOT-SQUARE-A/B	A-98-04-3303F RATE 67RO	PAR 27-04574-3	620618	FACTORY	YES HONEYMELL NO JRS 101AE	687543
FAILURE MODE-OUT OF OF 330.EG.PE.	TOLETANCE-GYNO WOULD NOT NEET TORQUING CALIBRATION SPECIFICATIONS DURING VIBRATION PORTION OF	QUING CALIBRATION SPECIF	ICATICAS D	URING VIBR	ATION PORTION OF	.
CORRECTIVE ACTION-NOME.	ME, REPORTED FAILURE MAS NOT CONFIRMED AFTER EXTENSIVE RETESTING.	IRHED AFTER EXTENSIVE RE	TESTING.			
AUTOFILOT-BOURK-A/B	8P-98-04-3EE0-F RATE 67RO	FAR 87-41008-909	1280	PACTON	YES ASTRONAUTICS NO ET-41002-908	•
FAILURE MODE-OUT OF PORTED PAILURE MAS A 1	TOLERANCE. DURING THE PLUS ROLL T HIGH OUT OF TOLERANCE GAIN IN THE	PLUS ROLL TORBUING TEST, IN PLIGHT CONTROL GAIN IN THE ROLL CHANNEL: PAILURE DUE TO A	CONTROL CH	CHECKS ON HE TOLERANCE BU	MISSILE 1800, THE RE Bulloup.	<u> </u>
CORRECTIVE ACTION-CAL RENEWIS, SYSTEM LEVEL CHART WILL BE UBED TO	CORRECTIVE ACTION-CALIBRATION WILL BE PERFORMED AT A B.D VOLT LEVEL BABED ON CURRENT AGENA PROGRAM TRAJECTORY REQUI Ements, system level torquing tests will be performed at the Calibration level of R.G Volts. Full width of Banborn Mart will be used to record embine pobition dutput ramp function.	E.D VOLT LEVEL BASED ON AT THE CALIBRATION LEVE MP PUNCTION.	CURRENT AGE	ENA PROGRA OLTB. FULL	M TRAJECTORY NEG . WIDTH OF BANBON	5 2
	interpretation objects the state of the stat					
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8787EH 8UR878TEH	TEST/REPORT MUNEER FAILED COMPONENT MANK	DIF DATA BOURCE PART NUMBER	DATE DIF TIME DIF	11 X 017	Y O	PRI VENDOR MANE OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	SF-SD-D4-SELSF RATE GVRO	FAR 27-41703-609	620612	Š	4.6	TES ASTROMAUTICS NO ET-41703-409	****
FAILURE MODE-OFEN (ELECT)	(ELECTRICAL). PITCH-RATE 67RO TORGUER WINDING CIRCUIT MAS OFEN.	NDING CIRCUIT MAS OF	ś	٠			
AUTOPILOT-SQUARE-A/B	A-SH-D4-3304F AMPLIFIER TRAMBISTON	FAR E7-41566-807	41 620012	4178	2 9		*****
FAILURE HODE-SHORT GELECT THE CIRCUIT BOARD HEAT SIN UT IN THE TAME ISOLATING T SHORT.	FAILURE HODE-SHORT GELECTI. HO-60 ON MAPCHE ROLL TORGUING TEST, TRANSISTOR CASE OF 86 MAS FOUND SHORT CIRCUITED TO THE CIRCUIT BOARD HEAT SIME, EXACT LOCATION OF SHORT CIRCUIT COULD NOT BE CONFISHED, MOST PRODABLE CAUSE MAS SHALL C OT IN THE TAPE ISOLATING THE TRANSISTOR CASE PROM THE HEAT SIME, TRANSFORMER TS FAILED AS A RESULT OF THE TRANSISTOR SHORT.	TEST, TRANSISTOR CAS T COULD NOT BE CONFI BINK, TRANSFORMER TS	E OF 86 WA	PRODABL A RESUL	E CAU	CIRCUITED TO SE WAS SMALL C THE TRANSISTOR	
CORRECTIVE ACTION-NOME.	MANUFACTURING PERSONNEL REMINDED OF PROPER TRANSISTOR MUNTING PROCEDURES.	F PROPER TRANSTATOR	MOUNTING P	ROCEDURE	á		
AUTOFILOT-SQUARE-A/B	A-29-04-3278F GTRO RATE	FAR 27-04574-3	620612	FACTORY	2 3	HOMETMELL JR3101A2	*201 **
FAILURE MODE-OUT OF TOLED D.NUELING RESISTOR WAS IN ED WACHE OR WHEN THE RESIS	FAILURE MODE-OUT OF TOLEMANCE, GYRO WAS REJECTED FOR MAVING A BURNED OUT MULING RESISTOR. FAILURE WAS NOT COMFIRME D.NULLING RESISTOR WAS IN SPEC ALTHOUGH IT APPEARED TO HAVE BEEN BLACKENED FROM AN EXTERNAL BOURCE, IT WAS NOT LEARN ED WAERE OR WHEN THE RESISTOR BECAME BLACKENED OR IF THE GYRO WAS REJECTED FROM A 67RO CAM.	6 A BURNED OUT MULL! BEEN BLACKENED FROM RG WAS REJECTED FROM	NG RESISTO I AN EXTERN I A SYRO CA	R. FAILU ML BOURG	¥	S NOT CONFIRME NAS NOT LEARN	
CORRECTIVE ACTION- NONE.	NOME. PAILURE WAS NOT COMPTRHED.		-		1		
AUTOFILOT-BQUARE-A/B 6130 PACKAGE	A-AG-GA-SELL-F DIBPLACEMENT GYRO TRANSISTOR	FAR E7-4100E-859	83F 8E0811	FACTORY	4 ES		:
FAILURE MODE-STRUCTURAL. CHBUCE AMPLIFIER WAS MEAT	FAILURE HODE-BTRUCTURAL. MO-GOS WERE RECEIVED ON CARDS 745 AND 747 DURING MAPCHE CHECKOUT. TRANSISTOR G4 IN PITCH T WEUER AMPLIFIER WAS HEAT BENSITIVE, AMALTSIS OF TRANSISTOR BHOWED CRACK IM BILICON CHIP.	AND 747 DURING MAPS BHOMED CRACK IN BIL	HE CHECKON	JT. TRAMS	18 TOR	94 IN PITCH T	<u></u>
CORRECTIVE ACTION-VENDOR	CORRECTIVE ACTION-VENDOR HAS CONTACTED. HE REPLIED THAT THE ZHSSS DEVICES ARE INSPECTED BEFORE ENCAPSULATION, BUT ILL INCRESSE SURVEILLANCE AND AUDIT OF THIS INSPECTION. VENDORS RECONDS SHOW NO PROBLEM WITH CRACKED CHIPS.	E ZNSSS DEVICES AND DORS RECONDS SHOW M	INSPECTED PROBLEH 1	BEFORE E	2 G S S S S S S S S S S S S S S S S S S	ULATION, BUT W	
						the department of the second	r
CORRECTIVE ACTION-VENDOR	AND AUDIT OF THIS INSPECTION. WEN	DONG RECORDS SHOW IN	PROBLEN 1	A TH	CRACE	CRACKED C	706, 807 706 048

	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBOR	¥			
SYSTEM SUG-SYSTEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF TIME DIF	DIF OTH	VENDOR NAME VENDOR PART NO	
AUTOFILOT-SEURE-A/B STRO PACKASE	A-BH-N4-8328F TORBUER AMPLIFIER-TRANSISTOR	FAR 27-41002-855	620611 ALTUS	₽ ₽	3/0	
FAILURE MODE-ELECTRICAL SHORT. TRO DID NOT MALL. ALSO YAN TORG TOR. THE TRANSISTOR OF TYPE ENS VOLTAGE ON THE GYROSCOFE INTER	FAILURE MODE-ELECTRICAL SHORT, 6YROSCOPE CANISTER FAILED DURING CHECKOUT PER TWO DID NOT MALL, ALSO YAW TORQUER WAS ERRATIC, TRANSISTORS GO AND GO TYPE HO TOR. THE TRANSISTOR GE TYPE ENSSS SHORT CIRCUITED ALL THREE ELEMENTS. FAILURE VOLTAGE ON THE GYROSCOPE INTERNAL PAR. SUPPLY DURING BITE MODIFICATIONS.		PROCEDUME 27-98401 PART 5. THE PITCH (2N539) WERE SHORTED EMITTER-TO-COLLE PROBABLY CAUSED BY A MISAPPLICATION (ONTED EM	PROCEDURE 27-98401 PART 5. THE PITCH 6 (2N539) WERE SHORTED EMITTER-TO-COLLEC PROBABLY CAUSED BY A MISAPPLICATION OF	
CORRECTIVE ACTION-BANE P	CORRECTIVE ACTION-BANE PERSONNEL CAUTIONED TO MAKE BURE THAT POWER IS NOT TURNED ON WHILE THEY ARE PERFORMING MOSF CATIONS.	IAT POMER 18 HOT TUR	ED ON WHILE TH	EY ARE P	ERFORNING MODIF	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	A-99-04-3307F TRANSFORMER TRANSISTOR	FAR 27-41378-815	620608 FACTORY	₩ ₩ ₩		897579
FAILURE MODE-SHORT (ELECT). TRA	3 A T	THARY WINDING FOUND TO BE OPEN. II E. CASE, MAS SHORTED TO GROUND, A F. F. EVIDENCE THAT THIS CAUSED SHORT.	TO BE OPEN. IN TO GROUND, A FI CAUSED BHORT.	VESTICAT	TON REVEALED CO	
CORRECTIVE ACTION-NOIG.	, CAUSE OF TRANSISTOR SHORT COULD NOT BE DETERHINED.	OT BE DETERMINED.				
AUTOPILOT-SQUARE-A/B STRO PACKAGE	A-9L-04-3419-F AMPLIFIER TRANSFORMER	FAR E7-41002-855	620608 LIN	LINCOLN YES	•	884155
FAILURE MODE-SHORT GELECTRICAL). TE IMPREGNATION.	ECTRICAL). SHORTED WINDING IN INTERSTAGE TRANSFORMER OF YAW TORBUER AMPLIFIER DUE TO INADERUA	STAGE TRANSFORMER OF	YAN TORBUER A	P LIFIER	DUE TO IMADERUM	
CORRECTIVE ACTION-A DOL	CORRECTIVE ACTION-A DOUBLE VOLTAGE DOUBLE FREQUENCY TRANSFORMER TEST WAS ADDED TO RECEIVING INSPECTION PROCEDURES	PORNER TEST WAS ADDE	D TO RECEIVING	INSPECT	ION PROCEDURES.	
AUTOFILOT-SQUARE-A/B GYRO FACKAGE	A-9M-04-3247-F 6YRO	FAR 27-41002-855	620607 SCH	SCHILLIN YES 60/C	5/03 6	***************************************
FAILURE MODE-OUT OF TOLERANCE.	LERANCE. PITCH GYRO FAILED TO MULL.					
CORRECTIVE ACTION-NOWE-FAILURE	-FAILURE NOT CONTIRNED.					
					PAGE 0482	

SENERAL DYNAMICS CONVAIR DIVISION

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AYATEN BLD-BYATEN	TEST/REPORT HUMBER FAILED COMPOMENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	VEHICLE BITE DATE DIF TIME DIF	O T H	VENDOR NAME	
UTOFILOT-SQUARE-A/B	A-88-04-3868F NATE 67RO	FAR 87-04301-1	6 20407	FACTORY	ğ Q	YES HOMEYMELL NO JRT 514	••1 700
FAILUME MODE-OUT OF TO 03 SERIAL 47.	TOLENANCE. TWO RATE SYROS HERE REJECTED FOR NOIST SPIN MOTORS FROM SAME GYRO CAN P/M 27-41703-8	FOR NOIST SPIN NOT	ORS FROM 1	LAME GYRO	N CAN	P/N R7-21708-8	
CORRECTIVE ACTION-NOME.	PRESENCE OF NOISE 4-98-03-3256-F CIRCUIT BOARD DIG	MAS NOT VERIFIED. NO SPECIFICATION FOR NOISE IN SPIN MOTOR EXISTS. FAR 620606 FACTORY NO DE 27-41804-5 NO	GR NOISE GEOGOS	PACTORY	5 2 2	EXISTS.	**
FAILURE MODE-SMORT-ELE STED WITH OHMETER, SHO CORECTIVE ACTION-ESP	CTRICAL. TWO LOGIC 4 BOARD! RIED DICOCS WERE ATTRIBUTED MAS REVISED TO REQUIRE USE	NEME REJECTED FOR HAVING PARTIALLY SHORTED DICDES. D TO USE OF CHHWETER RATHER THAN APPROVED DICDE TESTER OF SIMPSON E69 FOR CHECKING DICDE LEARAGE RESISTANCE.	TIALLY SHE	20 0100E	DES. TESTE TAMCE	DIODES MERE TE	
NUTOFILOT-SQUARE-A/B	A-9H-04-32F4F AMPLIFIER	FAR 27-45045-5	\$0902\$	SMILLING MILLING	22		
FAILURE MODE-OUT OF TO R AMPLIFIERS WERE FOUND ATTRIBUTED TO THIS WIR	FAILURE MODE-OUT OF TOLERANCE-RETCRINCE IR 187408. CAN WAS REJECTED FOR LOW READING IN YAM CHANNEL. ENITTER FOLLOME R AMPLIFIERS WERE FOUND BABLY BURNET, A WIRING ERROR WAS FOUND IN THE UNB LICAL-J-BOX AT CONFLEX 07. THE FAILURE WAS ATTRIBUTED TO THIS WIRING ERROR.	HEJECTED FOR LOW RE UND IN THE UND LICAR	ADING IN	COMPLEX		HE FAILURE WAS	
CORRECTIVE ACTICAL-WIRI	WIRING ERROR IN UMBILICAL J-BOX WAS CORRECTED. NO OTHER CORRECTIVE ACTION WAS TAKEN.	ECTED. NO OTHER COR	ECTIVE AC	TION IES	TAKÖ		
AUTOFILOT-SQUARE-A/B	A-99-04-3322F SMED-CIRCUIT BOARD	7AR 27-451855	\$0000	FACTORY	ž Š		0
FAILURE HODE-OUT OF TO EN GREATER THAN 10 VOLT NAS UNCONFIRMED.	F TOLERANCE, SAMD CIRCUIT BOARD WAS REJECTED FOR A REPORTED OUTPUT OF 0.4 VOLT. IT SHOULD HAVE BE VOLTS. THE CIRCUIT BOARD WAS ELECTRICALLY TESTED IN LAS AND IN FACTORY AND BOTH TIMES THE FAILURE	CTED FOR A REPORTED Y YESTED IN LAS AND	OUTPUT OF 0.4 WOLT. IT SHOULD IN PACTORY AND BOTH TIMES THE	0.4 VOLT	± = = = = = = = = = = = = = = = = = = =	SHOULD HAVE BE	
CORRECTIVE ACTION-NOT	NOT KNOKM.						

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STREM BLG-STREM	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART MUMBER	VEHICLE DATE DIF	117E	PHI VENDOR NAME OTH VENDOR PART NO	ă r	
AUTOPILOT - SQUARE - A/B GYRO PACKAGE	A-99-04-3293F 64RO DI SPLACEMENT-SAMO	7AR 7-04880-8	\$00020	FACTORY	TEB KEARFOTT NO	-	
FAILURE MODE-OUT OF TOL	TOLERANCE, SHRD OUTPUT WAS LOM. SHAD MACHET HAD BEEN DEMACHETIZED, CAUSE OF DEMACHETIZATION WAS	MACHET HAD BEEN DEMAC	HETIZED. C	AUSE OF D	ENAGNETI ZATI OL	i	
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME-CAUSE OF FAILURE MAS NOT KNOWN.						
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-84-42-46-A	FAR R7-410GR-899	\$50803	\$#1771Mg	5/05 04 04		
FAILURE MODE- FAIL DUR! ERE FOUND IN ALL SIGNAL ILURE OF THE 67RO IS ATT	FAILURE MODE- FAIL DURING OPERATION, GYRO CANISTER NAD NO CUIPUTS. EXTENSIVE DAMAGE AND OPEN-CIRCUITED COMPONENTS W ERE FOUND IN ALL SIGNAL PATHS, A WIRING ERROR WAS FOUND IN THE UMBILICAL JUNCTION BOX AFTER THE FAILURE OCCURRED, FA ILURE OF THE GYRO IS ATTRIBUTED TO THIS WIRING ERROR.) OU/PUTS. EXTENSIVE O	AMAGE AND ON BOX AFT	OPEN-CIRC ER THE FA	ULTED COMPONEI FLURE OCCURRES	32	
CORRECTIVE ACTION-WIRING	A ENROR WAS CORRECTED.						
AUTOPILOT - SQUARE - A/B GYRO PACKAGE	A-99-04-4010F 3447D	FAR E7-85007	******	FACTORY	YES 40/C NO M324599		206368
FAILUME MODE-FAILED TO . D.	TO CPERATE AT PRESCRIBED TITME, COMPONENT INDICATED GO ON A NO-GO TEST, FAILURE MAS NOT VERIFIE	MENT INDICATED 60 ON	A HO-60 15	ST. FAILU	RE MAS NOT VE	<u> </u>	
CORRECTIVE ACTION-WOME, FAILURE NOT CONFIRMED.	FAILURE NOT CONTENED.						
AUTOFILOT-SQUARE-A/B SYRO PACKAGE	A-99-04-327AF Didplacthent gyro	7-04250-1	42 0 6 01	FACTORY	YES KEARFOTT NO		*****
FAILURE MODE-OUT OF TOLI	TOLERANCE. THO GYROS, SERIAL MUMBERS 3629AB AND 3987ABDE, MERE REJECTED DUE TO NOMLINEAR OUTPUT Ted mmether symos mere in the Gyro cammisters when rejected.	S624AB AND S967ABDE. Indisters when rejecte	WERE REJEC D.	TED DUK T	O NOMETHEAR OF	Toer	
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOWE, THE FAILURE WAS NOT CONFIRMED.						
	расустан на лісінара — часта реформу і пр. Ставуй місяна да режені праводу праводу вістення праводу веровання				PAGE DAR4	7270	

GENERAL MAMICS

	The second secon				-		_
を 1 日本 1 日本 1 日本 1 日本 1 日本 1 日本 1 日本 1 日	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE OFF	817E 71MC 31F	0 H I	VENDOR HANE	 1
AUTOFILOT-SQUARE-A/B	A-8M-04-3855-F GTRO	FAR 27-41002-855	420323	***	♀ ♀	50 / C	*****
FAILURE MODE-OUT OF TO IN THE MAIN 6YRO CAN.	TOLERANCE, MAIN STRO CAN MAS REJECTED FOR LOW TORQUE. IN. FAILUME WAS ATTRIBUTED TO FAULTY TEST EQUIPMENT AT	for Low Tongue Generator It Eguiphent at the Bite.	ATOR OUTPU		300	GENERATOR OUTPUT. NO DISCREPANCY MAS FOUND THE SITE.	
CORRECTIVE ACTION-MONE AUTOPILOT-SQUARE-A/B 67RO PACKAGE	CORRECTIVE ACTION-MOME. FAILURE NOT CONFIRMED. TOPILOT-SQUARE-A/B A-89-04-3372F RO PACKAGE RATE GINGSCOPE MICROBYN POTENTIONE E7-04574-8 TER	FAR E 27-04574-3	620329	FACTORY		YES HINN, -HOMETNEL 894696	•
FAILURE MODE-OUT OF TO THE GYRO MAS DISASSEMBLE E CEMENY INDICATED POSS	FAILURE WODE-OUT OF TOLERANCE-RATE GYRO FAILED AN 18/D FOR HIGH NULL VOLTAGE OUTPUT. THE FAILURE WAS CONFIRMED AND THE GYRO GASSEMBLED. THE STANIAL EMENTATION OF TI THE GYRO WAS DISASSEMBLED. THE SIGNAL GENERATOR ROTOR WAS FOUND ERCHEN LOOSE FROM THE GYRO GIMBAL. EXAMINATION OF TI E CEMENY INDICATED POSSIBLE INADERUATE ADMESTON OF THE BONDING CEMENT.	AN IR/D FOR HIGH NULL VOLTAGE OUTPUT. ROTOR WAS FOUND ERCKEN LOOSE FROM THE OF THE BONDING CEMENT.	MYPUT. THE ON THE GYR	FAILURE O GIMBAL.	¥ 2	THE FAILURE WAS CONFIRMED AND GYRO GIMBAL. EXAMINATION OF TH	
CORRECTIVE ACTION-A ENG THE CONTACT SURFACE OF	CAP PULL TEST ADDED TO INSPECTION THE STAIMESS STEEL DID CAP BUTCHE	PROCEDURES. ALSO A LIGHT SANDBLAST OPER CENENTING TO INCREASE STRENGTH OF BOND.	LEHT SANDBI	CAST OPER OF BOND.	A710	HARB ADDED TO	
AUTOFILOT-SQUARE-A/B	A-9N-04-3253-F GYRO-SMRO	FAR 87-45049-5	420523	MILLING NO	1	5,·C	081389
FAILURE MODE-ELECTRICA IRCUIT WAS FOUND, FAILU	FAILURE MODE-ELECTRICAL OPEN. UNIT WAS ON MISSILE 30F WHEN ANOTHEP UNIT WAS DAMAGED BY OVER VOLTAGE. AN OPEN SHAD C IRCUIT WAS FOUND. FAILURE WAS ATTRIBUTED TO APPLICATION OF INCORRECT EXTERNAL VOLTAGE.	I ANOTHEP UNIT WAS DA	HAGED BY OF	MER WOLTA		IN OPEN SHAD C	والمراجعة والمستوار والمراجعة والمستوار والمستوار والمستوار والمراجعة والمستوار والمستوار والمستوار والمستوار
CORRECTIVE ACTION-PERS	CORRECTIVE ACTION-PERSONNEL REQUESTED TO CHECK ALL TEST VOLTAGES BEFORE APPLICATION.	LTAGES BEFORE APPLIC	AT10N.				
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-04-04-3244F 67RO	FAR 27-41002-653	6205E1	BHILLING HO TES	_	50 / C	*****
FAILURE MODE-OUT OF TO AILURE IN THE THO RATE ION THO RATE GYRO CANNI	TOLERANCE, SWED INDICATED NO-60, FAILURE NOT CONFIRMED. SHRD NO-60 WAS ATTRIBUTED TO EITHER A F TE GROUP OR GROUND TEST EAUIPMENT. FAR A-8M-04-3253 DOCUMENTS THE FAILURE AMALYSIS OF THE COMPAN MHISTER.	RE NOT CONTINED. SH A-SH-O4-3253 DOCUMEN	RD NO-GO W	AS ATTRIB	2 E	OF THE COMPAN	
CORRECTIVE ACTION-NOME.							
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GENERAL DYNAMICS CONVAIR DIVISION

15 JUN 1966

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DIFFICULTIES REVIEW-AUTOPILOT BYSTEM-AIRBORNE

8787EM 846-8787EM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE FART HUMBER	VEHICLE SITE DATE DIF TIME DIF	O TR	VENDOR NAME VENDOR PART HO	,
AUTOFILOT-SQUARE-A/B 6780 PACKAGE	A-SH-D4-324SF GYRO	FAR 27-41002-835	020321 BHILLING NO	3,63 64 64 64 64 64 64 64 64 64 64 64 64 64	9,	
FAILURE MODE-OUT OF TOLERANCE AND DC CIRCUITS SUCH AS CHARR MAS ATTRIBUTED TO IMPROPER APP	FAILURE MODE-OUT OF TOLERANCE. NO VOLTAGE PRESENT AT PITCH MONITOR OUTPUT LINE, CANISTER HAD EXTENSIVE DAMAGE TO A AND DC CIRCUITS SUCH AS CHARRED STRO COARSE HEATERS AND SPIN MOTOR TRANSFORMER OPEN CIRCUITED AND CRACKED. FAILURE MAS ATTRIBUTED TO IMPROPER APPLICATION OF VOLTAGE.	EN MONITOR OUTPUT LINE.	. CANISTER HAD EXTENSIVE DAMAGE TO AC OPEN CIRCUITED AND CRACKED. FAILURE	XTENSIVE (AND CRACKI	DAMAGE TO AC	
CORRECTIVE ACTION-LAKNOWA.	yer.					
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-9L-64-3257F DISPLACEMENT 67RO AMPLIFIER	FAR 27-41002-855	34F LAFB 620519	YES NO		•••
FAILURE MODE-OUT OF TOLERANCE TEMPERATURE SENSITIVITY. TEMPE RE ANALYSIS. PITCH SIGNAL AMP SHORTED PRIMARY TO SECONDARY.	FAILURE MODE-OUT OF TOLERANCE, MAIN GYRO CAN MAS REJECTED FOR PITCH DISPLACEMENT GYRO SENSITIVITY TOO HIGH AND FOR TEMPERATURE SENSITIVITY. TEMPERATURE SENSITIVITY, TEMPERATURE SENSITIVITY WAS NOT COMFIRMED, PITCH GYRO LOST SYNC INTERHITTENTLY DURING FAILU ME ANALYSIS. PITCH SIGNAL AMP RESISTOR RED MAS BURNED, DICOE CR5 WAS SHORTED, DICOE CR6 MAS OPEN, TRANSFORMER TI WAS SHORTED PRIMARY TO SECONDARY.	D FOR PITCH DISPLACEM CONFIRMED. PITCH 6TRO CDE CRS WAS SHORTED. (ENT GYRO SENSITIN LOST SYNC INTERNIONE CRE MAS OPE	IITY TOO H IITTENTLY N. TRANSF!	ICH AND FOR DURING FAILU ORNER TI NAS	
CORRECTIVE ACTION-67RO SYNC NO ACTION WAS TAKEN ON THE DA	CORPECTIVE ACTION-GYRO SYNC PROBLEM WAS EXPECTED TO BE CORRECTED BY THE SPINHOTOR RELIABILITY NO ACTION WAS TAKEN ON THE DANAGED BIGHAL AMPLIFIER BECAUSE ADEQUATE HISTORY WAS NOT AVAILABLE AGE OCCURRED. DANAGE WAS ATTRIBUTED TO HISAPPLICATION OF VOLTAGE.	ORRECTED BY THE SPINH SE ADEQUATE HISTORY W VOLTAGE.	SPINNOTOR RELIABILITY ORY WAS NOT AVAILABLE		PROGRAM AT KEARFOTT. TO DETERNINE WHEN DAN	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	HG-98-04-3191-F HEATER-CONTROLLER	FAR 27-41002-897	620516 ETR	YES HA	MAGNETIC CONTR CLS TC7C-1 8/N 138	
FAILURE MODE-ERRATIC OF FINE HEATER WAS REPORTED FIER HEATER CONTROLLER.	FAILURE WODE-ERRATIC OPERATION-DURING PERFORMANCE OF CHECKOUT PROCEDURE 27-9047A-DK3J. THE PITCH DISPLACEMENT GYRO FINE HEATER WAS REPORTED TO MAVE AN INTERNITTENT READING. THE PAILURE WAS CONFIRMED AND TRACED TO THE MAGNETIC AMPLI FIER HEATER CONTROLLER. THE CONTROLLER OPERATES SATISFACTORY WARN WARNED UP, BUT NOT WHEN COLD.	CKOUT PROCEDURE 27-90 THE FAILURE WAS CONT ORY WIEN WARNED UP. B	174-BKSJ. THE PI- IRHED AND TRACED JT NOT WHEN COLD.	TCH DISPLA TO THE MA	CEMENT GTRO	
CORRECTIVE ACTION-THE HEATER NUFACTURED DURING A PERIOD WHE	CORRECTIVE ACTION-THE HEATER CONTROLLER WAS RETURNED TO THE VENDOR FOR ANALYSIS. RECORDS SHOW THAT THIS UNIT WAS MA MUFACTURED DURING A PERICD WHEN THE YENDOR WAS EXPERIENCING DIFFICULTY WITH POTTING TECHNIQUES. THE PROCESS HAS SINC E BEEN IMPROVED.	THE VENDOR FOR AHALYS HE DIFFICULTY WITH PO	IS. RECORDS SHOH TTING TECHNIQUES	THAT THIS	. UNIT WAS HA ESS HAS SINC	
AUTOFILOT-SQUARE-A/S GYRO PACRACE	A-99-04-3272P RATE 67RO	FAR 27-04574-3	620516 FACTORY		YES HONEYNELL NO JASSOSAE	
FAILURE MODE-SHORT (ELECT).	ICT). GYRO HAD SHORTED TORQUER WINDING, SHORT WAS CAUSED BY POOR WORRMANSHIF.	DING. SHORT WAS CAUSE	D BY POOR WORKHA	NSHIP.		
CORRECTIVE ACTION-HONEYMELL	THELL INCORPORATED INSULATION TO PREVENT SHORTS OF THIS NATURE PROH OCCURING AGAIN. CHANGE WA	MEVENT SHORTS OF THIS	HATURE PROH OCC	UR116 A6A1	IN. CHANGE W	
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STSTEN SUB-SYSTEN	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA BOUNCE FART NUMBER	VEHICLE DATE DIP	\$17E 71ME OIF	PRI OTH VE	VENDOR NAME VENDOR PART HO	
3	MANNIFACTURED AFTER MARCH 1868.						:
AUTOFILOT-SQUARE-A/B GTRO PACKASE	A-89-04-3282F 67RO, DISPLACEMENT	7.04830-8	916020	FACTORY	YES KEARFOTT NO:	LRFOTT.	***************************************
FAILURE MODE-DRIFT. 67 RIMG FAILURE AMALTSIS.	STRO NAD EKCEBBIVE DRIFT ON BENCH TEST. OPCRATINS TIME MAS 70.4 HOURS. FAILURE NOT CONFIRMED DU 1.	ST. OPERATING THE MA.	1 70.4 HOV	16. *AILW	F HOT	CONTINUED DU	
CORRECTIVE ACTION-NOME.	E. FAILURE HOT CONFIRMED.						
AUTOPILOT-SQUARE-A/B GTRO FACKAGE	54713/E1-6HO-D8-15 HEATER	COMPOST TE-PRD/DPL	196	3766-1	ž g		4444
FAILURE MODE-FAIL DUR	WING OPERATION. RATE GIND MEATER FAILED DURING TEST.	ILED DURING TEST.			,		
BYSTEM EFFECT-EMMATIC	BYBTEM EFFECT-CRRATIC OPERATION, INTERMITTENT AUTOFILOT FAIL, INDICATIOND.	FAIL INDICATIONS.					
VEHICLE EFFECT-COMPOSITE ABORTED.	ITE ABORTED.						
CORRECTIVE ACTION-HEATER	TER PLUG RECOMMECTED.						
AUTOPILOT-SQUARE-A/B	A-\$9-04-3£08-F RATZ-6YRO	FAR 27-04574-3	905030	FACTORY	VE. 15	VEB HONEYMELL NO JRSIDIAE	*****
FAILURE MODE-OUT OF SA CHECKED MITHIN SPECIFIS	FAILURE MODE-OUT OF SPECIFICATION. REJECTED BECAUSE THE GYRO COULD NOT BE CALIBRATED. MO CHECKED MITHIN SPECIFICATION. CALIBRATION IS PERFORMED BY ADJUSTING THE ENITTER FOLLOMER.	GYRO COULD NOT BE CAL ! ADJUSTING THE ENLITE	IBRATED. ME R FOLLOMER	OT EXPLANT	ANDLE DE	BE CALIBRATED. MOT EXPLAINABLE BECAUSE 67RO EMITTER FOLLCHER.	
CORRECTIVE ACTION-HOME.	E. FAILURE WAS NOT EXPLAINABLE AND CAUSE COULD NOT BE DETERMINED.	CAUSE COULD NOT BE DE	TCRMINED.				
AUTOFILOT-SAUARE-A/B GYRO PACKAGE	A-99-04-3275-F MACHETIC AMPLIFIER	FAR 80-07800-021	62 0505	FACTORY	763 763 763 763	MAGMETEC CONTR	***
FAILUME MODE-FAILED DI YBIS MAS PERFORMED. FA E TIME THE VENDOR MAS I	DURING CPERATION, PITCH CHANNEL FAILED DURING BENCH CHECKOUT, FAILURE WAS CONTINED BUT NO AMAL FAILURE WAS ATTRIBUTED TO FAULTY POTTING TECHNIQUE BY YENDOR: AS PART WAS MANUFACTURED DURING TH A MAYING DIPFICULTY WITH POTTING.	LED DURING BENCH CHECK FING TECHNIQUE BY YEND	OUT. FAILU	THE MAS CO	W I RMED UPACTURE	BUT NO AMAL ED BURING TH	·····
COMECTIVE ACTION-NOME.	į						
						h d	·
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SEMERAL VAICE CONVAIR L. VISTON

VOCULOU-SAUME-AR A-A-D-2-EGG-C TAN PACKAKE MATE GING CANISTEN PALLUKE HOCE-STRUCTURAL. BY VIDAL INSPECTION THE UNIT HES NOT ACCEPTABLE FOR INSTRLLATION DAE TO EXTENSIVE DANAGE RESULTING FROM HISHADLING. CORNECTIVE ACTION-HOME-ANALYSIS WAS CANCELLED. TALLUKE HOCE-CONTAMINATION A MERICAN VARIABLE TEST INDICATED THE PREMERE OF MERICAN WITHIN THE CANISTER. THE CANISTER THE THE CANISTER. THE CANISTER THE THE WIGHT THE THE THE THE THE THE THE THE THE T	
J 3 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	J # # # # # # # # # # # # # # # # # # #
10 H	3 F H
## F ##	# # # # # # # # # # # # # # # # # # #
A HEAVIER FLEX-LEAD RIBBON. TH T BYC YES NO TO BIGHAL OUTPUT. THE TWO RATE ND BIGHAL OUTPUT THE TWO RATE ND BIGHAL OUTPUT THE TWO RATE A THE TWO RATE PACKAGE.	A HEAVIER FLEX-LEAD RIBBON. TH T BYC YES NO D BIGHAL OUTPUT. THE TWO RATE IND IBOLATED TO THE BHED RIBHAL HTHE THO RATE PACKAGE.
DED AN INTERNITTENT SHOTO SIGNAL OUTPUT. THE TWO RATE PAILURE WAS CONTINUE IN THE TWO RATE THEIL WAS HO PAILURE IN THE TWO RATE PACKAGE.	DED AN INTERNITTENT SHOTO SIGNAL OUTPUT. THE TWO RATE PAILURE WAS NO PAILURE IN SHED SIGNAL THE SHOTO SIGNAL THEIL WAS NO PAILURE IN THE TWO RATE PACKASE.
RO PACKAGE PROVIDED AN INTERNITTENT SHED SIGNAL OUTPUT. THE TWO RATE ID TO TESTS. THE PAILURE WAS CONTINUED AND ISOLATED TO THE SHED SIGNAL IN STRU PACKAGE. THEME WAS NO PAILURE IN THE TWO RATE PACKAGE.	NO PACKAGE PROVIDED AN INTERNITTENT BARD BIGHAL OUTPUT. THE TWO RATE D TO TESTS. THE PAILURE WAS CONFIRMED AND ISOLATED TO THE SHED SIGHAL M STRU PACKAGE. THERE WAS HO PAILURE IN THE TWO RATE PACKAGE.

18 JUN 1866

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

0 1	***	1	2	
PRI VENDOR NAME OTH VENDOR PART NO	5-E YES 1.53 NO THE 3 DISPLACEMENT 6YROS DUE		56F 5-2 YES \$20424 1.53 NO MORE OF THE 3 RATE EYROS DUE TO AN IN	WES REARFOTT NO AND THE PITCH AND E TO A DISTORTE! TEST SET TO TEST THOSE SCALE A-C VO WES NO TEST NO
£ 5	4 6 4 6 4 6 4 6 6 4 6 6 6 6 6 6 6 6 6 6		D E	AND TE TO AND TE
\$17E	3-E 1.53 14E 3 DIA	1050 5.	1.53 1.53 146 8 RAT	HENT GYRG TATE WAS INT AND OCTERMINA CONTRACTOR TO TO CETAIN
VEHICLE DATE DIF	597 620424 HORE OF	ATER.	550 24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	COLTAGE ON ONLY ON ONLY ON ONLY ON ONLY ON ONLY ON ONLY ONLY
DIF DATA SOURCE PART NUMBER	CAPTIVE N 27-41002-855 DE FAILED IN OME OF	CARED 1.ET SECONDS 1	8 21	FAR ET-4100E-807 FT RATE IN THE PITCH EVERLED THAT THE HIG DUE TO A FAULTY TEST DUE TO A FAULTY TEST ALEAD DISTORTION PR I INSTITUTED. IN ADDIT FAR ET-4100E-887 HSSITIVITY WAS REPORT LY HIGHER THAN NOMIN LY HIGHER THAN NOMIN LY HIGHER THAN NOMIN LY HIGHER THAN NOMIN LY HIGHER THAN NOMIN
TEST/REPORT NUMBER FAILED COMPONENT MAME	AE62-0352/32-601-41-59 CAPTIVE 59F AUTOPILOT DISPLACEMENT 67RO SPIN N 27-41002-855 820484 OTOR TC CMERATION, AN AUTOPILOT 6780 SPIN MOTOR FAILED IN OME OF NOME OF	SYSTEM C'FECT-MOME. SYSTEM C'FECT-MOME. WONICLE EFFECT-MOME. CORRECTIVE ACTION-THE BYRO CAMISTER WAS SUBSEQUENTLY IR/D (IRASAISA) AND MERLACED ON SE0505.	UTOPILOT-SQUARE-A/B AEGR-033E/RE-801-A1-59 CAPTIVE 50F 4-E TRO PACKAGE AUTOPILOT RATE 6YRO 3PIN HOTOR, E7-45043-5 620424 1.53 FAILURE HODE-ERRATIC OPERATION, AM AUTOPILOT 6YRO 3PIN HOTOR FAILED IN ONE OR MORE OF THE 3 ADEQUATE STWCHRONOUS SPEED BUILDUR. THIS FAILURE CLEARED 1.27 SECONDS LATER. WEHICLE EFFECT-HOME. VEHICLE EFFECT-HOME.	TAILURE HODE-DRIFT-THE FAILURE WAS INDICATED BY A HIGH DRIFT RATE IN THE PITCH DISPLACEMENT GYRO AND THE PITCH AND THE CAROL STATES WAS DUE TO A DISTONTE. FAILURE WAS LOST COLORAGES ANALYSIS REVEALED THAT THE HIGH DRIFT RATE WAS DUE TO A DISTONTE. FOR LINCOMPATIBILITIES. CORRECTIVE ACTION-GOLC AND THE VEHOOR ARE STUDYING THE BEEN INSTITUTED. IN ADDITION A BECKNAM ENFANCED SCALE A-C VO. THE SECURACY HAVE BEEN INSTALLED IN ALL TEST SETS IN USE. UTOPILOT-SHUME-A/B ME-88-04-3155P VARO PACAGE FAR. CORRECTIVE ACTION-GOLC AND THE VEHOOR ARE STUDYING THE FERN LESS IN USE. UTOPILOT-SHUME-A/B ME-88-04-3155P VARO PACAGE AMPLIFIER PAR. CORRECTIVE ACTION-GOLC AND THE VEHOOR ARE STUDYING THE FERN LESS INTO THE WAS CONFIDENCE. FAILURE WAS COMPARISED TO THE PROCESS OF THE STUDYING SECOND THE TEST SETS IN USE. PAILURE HODE-OUT OF TOLERAMEE. THE MOLE PROGRAM SLAVING SENSITIVITY WAS REPORTED OUT OF TOLERAMEE. FAILURE WAS COMPANIED. FAILURE COULD MAYE BEEN DUE TO THE FOLLOWING. SLIGHTLY HIGHER THAN HONITALE MAY HAVE BEEN LON. PAILURE COULD MAYE BEEN DUE TO THE FOLLOWING. SLIGHTLY HIGHER THAN HAVE BEEN LON.
8781EM 846-8781EM	AUTOPILOT-18UARE-A/B AEGE STRO PACKAGE AUTO OTOR PAILURE MOSE-EBBATTC CHEBATIO	TO AN IMADEGUATE SYNCHRONOUS SYSTEM EFFECT-NOME. VEHICLE EFFECT-NOME. CORRECTIVE ACTION-THE 67NO C	AUTOPILOT - SQUARE - A/B AEG BYRO PACRAGE AUTOPILURE HODE - ERRATIC OPERATI ADEQUATE STWCHROHOUS SPEED BL SYSTEM EFFECT - MOME. WEHICLE EFFECT - MOME. CORRECTIVE ACTION- THE GYRO C	AUTOFILOT-SQUARE-A/B SP- GYRO PACKAGE FAILURE HODE-DRIFT-THE FAILUROLL PROGRAM SLAVING WAS LOW LEX LEAD. THE OUT-OF-TOLERANG MEX INCOMPATIBILITIES. CORRECTIVE ACTION-60/C AND TACTION DAILY CALIBRATION TEST THETERS OF U.1 PERCENT ACCURA AUTOFILOT-SQUARE-A/B HE- ØYRO PACKAGE PAILURE HODE-OUT OF TOLERANC IRMED, FAILURE COULD HAVE BEET ING.

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18 JUN 1886

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15 JUN 1986	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME	PILOT SYSTEM-AIRBOR!					,
SYSTEM SUG-STSTEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE SITE	117E	15	VENDOR HANE VENDOR PART NO	
CORRECTIVE ACTION-ETR MAS BEEN NOTIFIED OF D REEP INCREASED SURVEILLANCE ON THE 40D CPR FOLLOWING, REVIEW FACTORY AND ETR TEST SETS FOMER SUPPLIES, MAINTAIN CLOSER SURVEILLANCE	CORRECTIVE ACTION-ETR HAS BEEN MOTIFIED OF RESULTS OF THIS FAR. THEY WERE RESUESTED TO FOLLOW MARH-UP PROCEDURES AND REEP INCREASED SURVEILLANCE ON THE 400 CPS 113 V RMS INMUT LEVEL. RELIABILITY CONTROL ENGINEERING WILL RESUEST THE FOLLOWING. REVIEW FACTORY AND ETR TEST SETS FOR INCOMPATIBILITY, MODIFY TEST SETS FOR BETTER VOLTAGE REGULATION ON POWER SUPPLIES, MAINTAIN CLOSER SUMPLILANCE DURING CANISTER CALISRATION.	RESULTS OF THIS FAR. THEY WERE REQUESTED TO FOLLOW MERM-UP PROCEDURES AN 1113 Y RAS IMPUT LEVEL, RELIABILITY CONTROL ENGINEERING WILL REQUEST THE 1 FOR INCOMPATIBILITY, MODIFY TEST SETS FOR BETTER VOLTAGE REGULATION ON 1 DURING CANISTER CALISHATION.	STED TO F CONTROL E	OLLOW MA	35.35	PROCEDURES AN LL REGUEST THE REGULATION ON	***************************************
AUTOFILOT-SEUARC-A/B STRO PACKASE	A-80-04-3186F 67RO-THENGATAT	FAR 27-45045-5	014038	Ę	5 5		•
FAILURE MOSE-ERRATIC OPERATION Y FOR COMMITS. ANALYSIS CONFIRM ING DPL. WHEN THE TEMPERATURE B. THE MOMENTARY NO-60 CONDITION.	FAILURE MOSE-ERRATIC OPERATION-MOMENTARY RATE 6YRO TEMPERATURE FAILURES OCCURRED DURING A 40 MIMUTE HOLD AFTER READ Y FOR COMMIT. ANALYSIS CONFIRMED THE FAILURE. THE FAILURE MAS DUE TO A THERMAL GRADIENT OCCURRING IN THE PACKAGE DUR ING DPL. WHEN THE TEMPERATURE SAFE THERMOSTAT CYCLED OFF BEFORE THE PACKAGE HEATER THERMOSTAT CYCLED ON. THIS CAUSED THE MOMENTARY NO-60 CONDITION.	UNE FAILUNES OCCURRI S DUE TO A THERMAL (RE THE PACKAGE HEAT	D DURING RADIENT O R THERMON	A 40 MIN CCURRING TAT CYCL	2	OLD AFTER READ HE PACKACE DUR THIS CAUSED	
CCARECTIVE ACTION- CHANG	CCRRECTIVE ACTION- CHANGED THE SETTING OF THE TEMPERATURE SAFE THERMOSTAT FROM 3G DEGNEES PLUS OR MINUS S DEGREES F TO 20 DEGREES PLUS OR MINUS S DEGREES F. THIS MAS ACCOMPLISHED 1,7 ECP 1687, CIC 13052.	AFE THERMOSTAT FROM	30 DEGREE	s PLUS O	M M	US S DEGREES F	
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	AE61-0888/LE-401-00-110	Р Д16ИТ	1100 6204U9	1-2	YES OF		****
FAILUKE MODE-OUT OF SPECIFICATION. THE GYRO PAC YOU, YAM AND ROLL) CHANNELS FOR REASONS UNKNOWN.	FAILUKE MODE-OUT OF SPECIFICATION. THE GYRO PACKAGE APPEARED TO OPERATE AT LOWER THAN NOMINAL GAIM IN ALL THREE (PI CHI, YAM AND ROLL) CHANMELS FOR REASONS UNKNOWN.	D TO OPERATE AT LOA	я тнан мо	3	ĭ	ALL THREE (P)	
SYSTEM EFFECT-INFROPER A	BYBTEM EFFECT-IMPROMER ANALOG BIGNALS. THE GYRO MACKAGE PRODUCED IMPROMER ANALOG BIGNALS RESULTING IN INADESUATE PI CH-OMER COMMAND TO THE FILTER-BERYO PACKAGE.	DUCED IMPROPER ANALO	A BIGNALS	RESULTI	ĭ	IMOESUATE PE	
WHICLE TFFECT-IMPROPER A HIGHER THAN HOMINAL TH	WINICLE TEFECT-IMPROPER TRAJECTORY, THE VEHICLE DID NOT PLACE THE SPACE VEHICLE IN THE PROPER CIRCULAR ORBIT DUE TO A HIGHER THAN MOHIMAL TRAJECTORY CAUSED BY IMADEBLATE PITCH-OVER BIGNALS.	ICE THE SPACE VEHICLI I-OVER SIGNALS.	IN THE P	ROPER CI	4 D	A CREST DUE TO	
CURRECTIVE ACTION-RECYCL TURGULM GAIN CHECKS TO VELEMETRY TO MONITOR PROT.	CHRECTIVE ACTION-RECYCLED GYRO PACKAGES TO FACTORY FOR CONFIDENCE CHECKS AFTER DUAL PROPELLANT LOADING, ADDED GYRO THROUGH GAIN CHECKS TO PRECOUNT, REVISED PRECOUNT TO PROVIDE PRECISE ADJUSTMENT OF HISSILE INVERTER VOLTAGE, ADDED TELEMETRY TO MONITOR PROBABLE PROBLEM PRINTON.	FIDENCE CHECKS AFTEI DE PRECISE ADJUSTNEI ENT FOR MANUAL EVAL	DUAL PRO IT OF HISS ATION OF	PELLANT 1LE INVE APCHE PI	ECADI RIER TCH	NG. ADDED GYRO VOLTAGE, ADDED ROGEAN FRINTOU	
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	.DA707/E1-8HO-03-18 HEATER	COMPOST TE-FRB/DPL E7-45D45-9	13F	37 0 E	\$ Q	5/0 / 0	
FAILURE MODE-OUT OF SPEC	FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE RATE SYRO HEATER TEMPERATURE WAS LOW. System eppect-improper discrete sissals. Autopilot fail indication received for approximately & Minutes.	CATER TEMPERATURE MA	LOW.	AYELY 8	ME WO	á	·····
WHICLE EFFECT-MOME.							
CORRECTIVE ACTION-LAKINGIAN.							

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#10-816 #10-818#	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA SOURCE	DATE DIF TI	ALTE PRI	VEHICLE SITE PRI VENDOR MANE	
AUTOFILOT-BRUARE-A/B	DA707/E1-640-02-15 HEATER	COHPOST TE-FND/DPL. E7-45048-9	157 87	974E-5 YES	TES 60/C NO	•
PAILURE HODE-OUT OF TO SYSTEM EFFECT-INFROPE	FAILURE HODE-OUT OF TOLERANCE, RATE 67RO HEATER TEMPERATURE LOM. THE 30 DEGREE THERNO SMITCH MAS OUT OF TOLERANCE. System effect-improper discrete bismal, autopilot fail indicatich received for 2 hinutes.	NE LOW, THE 30 DEGREE SICATICH RECEIVED FO	THERMO SMITE	14 8 001	OF TOLERANCE.	
MEMICIE EFFECT-NOME.						
CORRECTIVE ACTION-LARCHDIAN.	O.A.					
AUTOFILOT-SAUARE-A/B	A-99-04-3186F THERMOSTAT	FAR 27-04582-1	620404 FA	FACTORY YES	VES STEVENS HO	0 2 2 4 0
FAILURE HODE-SHORT /EI THE MANUFACTURING AREA. ED. THIS MAY HAVE BEEN	FAILURE HODE-SHORT ZELECTRICALZ, THE ITEM THERMOSTATS NEWE REPORTED TO BE SHORTED INTERNALLY DURING BENCH TESTS IN THE MANUFACTURING AREA, THE FAILURES NERE NOT CONTINED. THESE ARE LOW TEMPERATURE THERMOSTATS AND ARE MORMALLY CLOSED. THIS MAY HAVE BEEN HISIMTERPRETED AS A SHORT CIRCUIT.	E REPORTED TO BE BHOS RESE ARE LOW TEMPERAT	TED INTERNALL	AN EFFE	E NORMALLY CLOS	
ECTION OF ACCEPTABLE 11	I TEMS.					
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-99-04-3167F THERHOGTAT	FAR 27-04583-1	REDADA FA	FACTORY YES	YES STEVENS NO	172140
FAILURE MODE-SMORT FEI TESTS, FAILURES MERE M M MISINTERPRENED AS A I	PELECTRICAL/. TWO THERMOSTATS WERE REPORTED TO BE SHERTED INTERNALLY DURING MANUFACTURING BEHCH ; not confirmed. These are low temperature thermostats and are mormally closed. This may have bee a short circuit.	DATED TO BE BHINTED I	NTERNALLY DU	LING MANUF	ACTURING BENCH IS NAY HAVE BEE	
CORRECTIVE ACTION-NAM	CORRECTIVE ACTION-HAMPACTURING PERBONNEL MORE NOTIFIED OF THE REBULTS OF THIS ANALYSIS IN AN EPFORT TO PREVENT REJ CITON OF ACCEPTABLE ITEMS.	THE RESULTS OF THIS	I AHALYBIB IN	AN EFFORT	TO PREVENT REJ	
AUTOFILOT-SQUARE-A/B EYRO PACRAGE	DA707/E1-68N-01-18 67RO-D: BPLACEMENT	COMPOST TE-PRO/DPL 27-45045-808	15f 37(976E-1 YES	3/08	
FAILUNG MODE-FAIL DURI COMPOSITE MAS STARTED	FAILUNE MODE-FAIL DURING OPERATION. A PLIGHT CONTROL FAIL INDICATOR RED WAS RECEIVED 4 MINUTES 37 SECONDS AFTER THE COMPOSITE MAS STARTED DUE TO A FAULTY YAW DISPLACEMENT 6YRO.	INDICATOR RED MAS RE NO.	CEIVED 4 NEW	JTE8 37 84	COMOS AFTER THE	
SYSTEM EFFECT-ERRATIC	TIC OPERATION.					····
WENICLE EFFECT-COMPOSI	WENICLE EPPECT-COMPOSITE ABORTED. PAILURE PREVENTED RECEIPT OF MISSILE READY FOR COMMENT AND CAUSED EXCESSIVE BOOST IF EMSINE YAM DISPLACEMENT.	PT OF MIBBILE READY !	OR COMENT A	CAUSED	EXCESSIVE BOOKT	

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	11 JUN 1966	CONVAIN DIVISION		•				
,		DIFFICULTIES REVIEW-AUTOFILOT STREEM-A INSCRIM	OFILOT ATSTEM-1 INBOR	¥ .				_
	STRIEM SUB-STER	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOURCE,	VEHICLE DATE DIF	\$17E 11ME 01F	0 P	VENDOR NAME VENDOR PART NO	
	CORRECTIVE ACTION-UNENDAM.	X-1.	and product and the contract of the contract o					***
	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-88-04-3197F CANISTER-O-RIM	FAR 87-48045-8	620403	8vc	£ 6		6.00
	FAILURE WODE-LEAK-THERE MAS E FAILURE LAS CAUSED BY A BR AUSE OF OVERTORGUING OF THE RHING AGAINST ADJUSTIENT OF ADDS A WARNING NOTE RESARDIN	FAILUME MODE-LEAK-THERE MAS A BLOWING LEAK AT THE PRESSURIZATION VALVE, ANALYSIS CONFIRMED THE REPORTED FAILURE. THE EASILUME LAS CAUSED BY A BROKEN O-RING BETHERE THE VALVE AND THE MOLATING PLATE, THE O-RING LAS PRODABLY BROKEN BEC ANISE OF OVERTORGUING OF THE MOLATING MUNIMPH CORRECTIVE ACTION-REVISION E TO MES E3.13. DATED 6 FED. 1963, ADDS A MARRING ACAINST ADJUSTMENT OF THE PRESSURIZATION VALVE FITTING MUT. AMENDMENT (A) TO THE PURCE AND PRESSURIZATION MPS ADDS A MARRING WOTE MESANDING THE TWO RATE 6780 PACKAGE.	ZATION VALVE, AMALYB ND THE MOUNTING PLAT ION-REVISION E TO MP 6 MUT, AMENDHENT (A)	18 COFTR E. THE O-1 8 E1-13. (TO THE P	ED THE R IING WAS NATED & F MGE AND	PROBAI PRESAI	ED FAILURE. TH SLY BROKEN BEC 843, ADDS A MA URIZATION MPS	
	CORRECTIVE ACTION-REVIS ON VALVE FITTING MUT. AN	CORRECTIVE ACTION-REVISION E TO MPS EL.13, DATED 6 PED. 1863, ADDS A WARNING AGAINST ADJUSTMENT OF THE PRESSURIZATI ON VALVE FITTING MUT. ANEMONENT (A) TO THE PURGE AND PRESSURIZATION MPS ADDS A WARNING MOTE REGARDING THE TWO RATE 6 TWO PACKAGE.	65, ADOS A WARNING A Rizatica and Ados A	CAINST AD	USTNENT STE REGAR	\$ 10 \$ 10	E PRESSURIZATI THE TWO RATE 6	
	AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-98-04-3204-C RATE 6YRO	FAR E7-41002-855	62040E	£	# Q	YES ASTROMAUTICS NO 27-41D02-855	686053
	FAILURE MODE-OUT OF TOL	OF TOLENANCE. PACKAGE FAILED IN THE GYRO LABORATORY AT ETR WHEN THE 2-WOLT RMS PITCH PROGRAM SLAVI TO BE 3 PERCENT ABOVE NOMIHAL! TOLENANCE IS PLUS OR HIMUS 15 PERCENT.	LABCRATORY AT ETR MA	EN THE R-	OL 7 RHS	P1104	PROGRAM SLAVI	manyan tanah seringga pangkang bahas
	CORRECTIVE ACTION-NOME.	. AMALYSIS WAS NOT PERFORMED DUE TO LACK OF AUTHORIZED FUNDING.	LACK OF AUTHORIZED F	UNDTHE.	A STATE OF THE PARTY OF THE PAR			
	AUTOFILOT-SAUAKE-A/B GYRO PACKAGE	A-84-04-3193F	FAR E7-41002-855	62 040 2	SCHILLIN NO	<u>9</u> 9		4.00
	FAILURE MODE-FAIL TO OF MER LINE MERE BLOMN WHEN ED. NO PACKAGE PAILURE C GENERATOR REPORTED AT 8	FAILURE HODE-FAIL TO OPERATE AT PRESCRIBED TIME-DURING ARMA INTEGRATION CHECKS, THE FUSES IN THE COMPLEX RE VOLT PO HER LINE HERE BLOWN HHEN POWER WAS APPLIED. THE GYRO PACKAGE WAS REPLACED AND THE CHECKS PERE SATISFACTORILY COMPLET ED. NO PACKAGE PAILURE COULD BE FOUND. THE REPORTED FAILURE WAS HOST PROBABLY CAUSED BY A MALFURCTION OF THE 400 CPS GENERATOR REPORTED AT SCHILLING AFB, RESULTING IN EXTEMSIVE REPAIR OF THE MISSILE HARNESS.	A INTEGRATION CHECKS E WAS REPLACED AND T WAS WOST PROBABLY C E REPAIR OF THE MISS	HE CHECKS AUSED BY A	SS ON THE PARE BAT MALPUNC 18.	135AC 110N	LEX ES VOLT PO TORILY COMPLET OF THE 400 CPB	
i	CORRECTIVE ACTION-NOME.							
	AUTOFILOT-SQUARE-A/B 67RO PACAASE	MG-08-04-5146F CIRCUIT BOARD-FILTER	FAR E7-4100E-887	1070 620402	8 53	ž š		
i		FAILUNE MODE-OMEN ELECTRICAL. BURING ÁUTOFILOT BYBTEN CHECKOUT, THERE WAS NO BHRD OUTPUT BIGNAL. FAILUNE ANALTBIB R EVEALED A R VOLT DC OUTPUT /8 VDC HIMINUM EXPECTED/, FAILUNE CAUGED BY AN INTERHITTENT CONNECTION DUE TO POOR SOLDER ENG EN THE ET-DASSE-1 FILTER IN THE SHED MODULE.	ROUT, THERE WAS NO S E CAUSED BY AM INTER	HETTENT C	T BI GHAL.	**************************************	URE AMALYSTS R TO POOR SOLDER	
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SENERAL L. MANICE CONVAIR DIVISION

18 JUN 1964

	DIFFICULTES REVIEW-AUGHL	FAUTOFIL BIER-AIRBORNE	¥.		ſ
3737EH 3UB-3737EH	TEST/REPORT MUMBER PAILED COMPONENT NAME	DIF DATA BOUNCE PART HUMBER	VEHICLE SITE	SITE PRI VENDOR NAME ME DIF OTH VENDOR PART NO	
CORRECTIVE ACTION-TH	CORRECTIVE ACTION-THIS FILTER IS NO LONGER USED. A NEW FILTER P/N 27-D486-8 OF IMPROVED SUALITY AND DESIGN IS PRESE	FILTER P/M 27-0486-8 O	THPROVED BUAL	IIY AND DESIGN IS PRESE	\$ # # # # # # # # # # # # # # # # # # #
AUTOFILOT-SQUIRE-A/B	A-99-04-3129F DISPLACEMENT 6YRO WIRING	FAR 7-04830-3	620331 FACTORY	ORY YES KEARFOIT NO CTG-2504-050	887303
FAILURE WODE-DRIFT. (BEND IN THE LEAD HEN HISHANDLING, TORGUIN COOL DOMN. THO OTHER	FAILURE WOSE-DRIFT, GYRO WAS REJECTED DURING CANISTER CHECKOUT-CAUSED BY DISTORTED FLEX LEADS, THE DISTORTION WAS A BEND IN THE LEAD HEAR THE JUNCTION WHERE INE FLEX-LEAD IS SOLDERED TO THE HOWNTING CLIP. DISTORTION MAY RESULT FROM HISHANDLING, TORGUING THE GYRO FLOAT BEFORE ADEQUATE WARNUP AND FLOM OF THE ALMOST SOLID FLOATATION MATERIAL DURING COOL DOMM. TWO OTHER DISPLACEMENT GYROS ARE INCLUDED IN THIS AMALYSIS.	CHECKOUT-CAUSED BY DIST I IS SOLDERED TO THE MOUNT MRHUP AND FLOW OF THE AL IN THIS AMALYSIS.		FLEX LEADS, THE DISTORTION WAS A CLIP. DISTORTION MAY RESULT FROM SOLID FLOATATION MATERIAL DURING	
CORRECTIVE ACTION-VENDOR READS. GD/C INCORPORATED	NDOR IS INCORPORATING BAFFLES TO PRECLUDE FAILURE FROM PLOM OF FLOATATION MATERIAL NEAR THE FLE ATED NEW HANDLING REGUIRENENTS.	MECLUDE FAILURE FROM PL	ON OF PLOATATIO	N MATERIAL NEAR THE FLE	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	RA-98-04-3149F	FAR E7-41002-499	420331 ETA	3/09 ON	***************************************
FAILUME HODE-FAIL DU CW THÜN CCW, THEN CM EALED A PINCHED CABLE	FAILUME HODE-FAIL DURING GPERATION. DUIING TESTING NO OUTPUT WAS OBTAINED IN THE YAW CHANGEL. HOVENENT OF THE TABLE CW THEN CCM, THEN CM, MADE THE OUTPUT HEAPPEAR. ANALYSIS SHONED THE CANISTER TO SE SATISFACTORY, RECHECK AT ETR REV EALED A PINCHED CABLE ON THE TEST SET IN WHICH A YAW COMDUCTOR WAS DAMAGED.	OUTPUT WAS CRIAINED IN 118 SHOKED THE CANISTER MONCTOR WAS DAMAGED.	THE YAW CHANNEL TO BE SATISFACT	, MOVEMENT OF THE TABLE ONY, RECHECK AT ETR REV	
CORRECTIVE ACTION-DA	DAMGED TEST EQUIPMENT CABLE REPAIRED.	Э,		Anagadore estado in principal Adapp (et majorina) de majorina Armado esta estado en estado en estado en estado	
AUTOPILOT-BRUARE-A/B	A-66-04-3169F 6YRO-RATE	FAR R7~04974-W	SEUSES FACTORY	ORY NO HINKEAPOLIS-HO NO NEYNELL JRS101AE	***************************************
PAILURE MODE-OUT OF	FAILURE MODE-OUT OF TOLERANCE. GYRO REPORTEDLY EXMIBITED AN EXCESSIVE OUTPUT. FAILURE WAS NOT CONFIRMED. THE SENSITI IVITY OF THE UNIT TEMBED TO BE ON THE LOM SIDE OF MONINAL BUT WAS WITHIN SPECIFICATIONS.	IED AN EXCESSIVE OUTPUT. AL BUT WAS WITHIN SPECII	PAILURE MAS NO FICATIONS.	T COMFIRMED. THE BENSET	····
CORRECTIVE ACTION-NO CORRECTIVE ACTION.	CORRECTIVE ACTION.			a de la companya de l	
AUTOFILOT-BRUARE-A/B GTEG PACKAGE	A-50-04-3178F CIRCUIT BOARD-WIRING	FAR 27-41002-655	820323 PMR	768 6 6	
PAILURE MODE-SHORT OF ALYSIS COMPIRMED THE I IRE AT PLUS RO VDC IN	GLECT) THE STRO PACKAGE WAS REJECTED MICH MO-GO WAS RECEIVED DURING MAPCHE CHECKOUT, FAILURE AN PAILURE, AMLYSIS REYEALED A SHORT CIRCUIT PROM THE TRANSISTOR CASE TAB TO AN INTERCOMMECTING M M THE SAMD LOSIE MODULE,	ED IMEN NO-GO WAS RECET.	VED DURING MAPC 1870R CASE TAB	HE CHECKOUT, PAILURE AN TO AN INTERCOMMECTIME N	
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GENERAL DYNAHICS CONVAIR DIVISION

18 JUN 1988

	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	OFILOT SYSTEM-AIRBO	¥				,
818-87EN 818-87EN	TEST/REPORT HUMBER	DIF DATA SOUNCE PART NUMBER	VEHICLE DATE DIF	11 ME DIF	# 0 # #	VEHICLE SITE PRI VENDOR NAME DATE DIP TIME DIP OTH VENDOR PART NO	,
COMPECTIVE ACTION-A -3	-3 CONFIGURATION OF THE SHED LOGIC MODUL? HAS BEEN KELEASED IMMEREIN THE TRANSISTOR 15 ROTATED A	UL? HAB BEEN KELEABE	W-EREIN	THE TRAN		M 18 ROTATED A	• • • • • • • • • • • • • • • • • • • •
PPROXIMATELY FIVE DEGRE THE SMELF HAVE BEEN REN	PPROXIMATELY PIVE DEGREES AND IS MRAPPED WITH WYLAR TAPE TO PREVENT POSSIBLE SHORT CIRCUITS. ALL -3 SHRD MODULES ON THE SHELF HAVE BEEN REHOVED AND SCRAPPED ON S-R-SE. THE -8 CONFIGURATION MENT INTO PRODUCTION IN MARCH 1982.	CONTIGURATION WENT	ONT CIRCUI	18. ALL TION IN	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	RD MODULES ON	
AUTOPILOT - BOUNKE - A /B	A-BU-04-3164F GTRO-DI BPLACEMENT	FAR 7-04250-1	420322	FACTORY	ž 6	YES REARFOTT NO T2508-2A	*****
FAILURE MODE-STRUCTURA MED. A FUNCTIONAL TEST EALED EVIDENCE OF LUBRI FAILURE WAS DUE TO OVER	FAILURE MODE-STRUCTURAL, DURING FACTORY TESTING, THE GYRO DEVELOPED EXCESSIVE BEARING NOISE. THE FAILURE MAS CONFIR MED. A FUNCTIONAL TEST REVEALED THAT THE SPIN MOTOR MOULD NOT ATTAIN STHCHRONOUS SPEED /24,000 RFM/. DISASSENBLT REV EALED EVIDENCE OF LUBRICANT DETERIORATION AND OVER HEATING. THE PHENOLIC BEARING RETAINER WAS CRACKED AND PONDERED, FAILURE WAS DUE TO OVERHEATING AND DEPLETION OF LUBRICANT.	DEVELOPED EXCESSIVE. NOT ATTAIN STWCHRONON THE PHENOLIC BEARIE	BEARING NO 18 SPEED /2 16 RETAINER	13E. THE 4,000 RF WAS CRA	K 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	LRE MAS CONFIR ISASSEMBLY REV AND POMDERED.	
CORRECTIVE ACTION-THE ACTION ON SPIN MOTOR FA RICANT THAT MAY INCREAS	CORRECTIVE ACTION-THE VENDOR HAS RECENTLY INSTITUTED A HOTOR RELIABILITY PROGRAM TO STUDY AND DETERMINE CORRECTIVE ACTION ON SPIN MOTOR FAILURES. THE VENDOR IS SUPPLYING A LIMITED QUANTITY OF GYROS MITH A NEW SPIN MOTOR BEARING LUB RICANT THAT MAY INCREASE PEARING LIFE AND REDUCE PAILURES.	OR RELIABILITY PROGRAMITED QUANTITY OF 63	AN TO STUD	Y AND DE	TERH TERH	NE CORRECTIVE OR BEARING LUB	
AUTOFILOT SQUARE-A/B	A-9W-04-3192F GTRO-RATE	FAR 27-45045-5	620324	SCHILLIN 1ES	ភូទ		***************************************
FAILURE MODE-CONTANTHA 303 INDICATING THAY TH NYANIMATION OF THE PITE 6 PLUS.	FAILURE MODE-CONTANIMATION-DURING PERFORMANCE OF MAPCHE CHECKOUT PROCELURE 27-98451-3, A NO-GO MAS RECEIVED ON CARD 305 INDICATING THAT THE GYRO SPEED (SMED) WAS OUT OF TOLERANCE. AMALYSIS CONFIRMED THE FAILURE, THERE WAS SLYRRE CO MAMINATIOM OF THE PITCH RATE GYRO BY LIGUID MEXCURY AND THE YAM RAIE GYRO WAS LEAKING DANGING PLUID FROM THE SEALIN 6 PLUG.	ECKOUT PROCELURE E?- AMCE, AMALYSIS CONFI E YAM RAIE GYNO MAS	P8451-3, A RRED THE F LEAKING DA	NO-60 M AILURE. Melike Pi	10 L	CEIVED ON CARD LAS SEVERE CO ROM THE SEALIN	
CORRECTIVE ACTION-RENO	CORRECTIVE ACTION-REMOVED THE HERCURY MANDMETERS PROM THE FACTORY AND PRODUCT SUPPORT LEAK TEST BENCHES	FACTORY AND PRODUCT	SUPPORT LE	AK 1E31	SC KC	£3.	
AUTOFILOY-SCUARE-A/B	CT-99-04-022F GYRO PACKAGE PEATER	FAR 58-41002-A09	1040 G E03E1	A A	£ 5		:
FAILURE MODE-OUT OF TO TB RMS. FAILURE ATTRIBU M.	FAILURE MODE-OUT OF TOLERANCE. UNIT REJECTED MAEN THE FINE HEATZR VOLTAGE CYCLED CONTINUOUSLY BETHEEN 20 AND 30 YOU. 18 AMS. FAILURE ATTRIBUTED TO IMPROPER INSTALLATION OF THE COMPENSATION RING. RESULTING IN AN INTERNITIENT COMMECTIO M.	HEATER VOLTAGE CYCL COMPENSATION RING, R	ED CONTINUES	OUSLY BE	CRM13	TENT COMMECTIO	
CORRECTIVE ACTION-CONST	CORECTIVE ACTION-CONSTRUCTION AND INSTALLATION TECHNIQUES NERE IMPROVED IN APRIL 1982 WHICH WILL ALLEVIATE THIS PR BLEM:	MERE IMPROVED IN AP	RIL 1982 W	H1CH W1U	174	EVIATE THIS PR	
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	CIFFICAL TIRE REVIEW-AUTOFILOT STSTEM-AIRPORME	TOPILOT BYBTEN-AIRBO	-	<u> </u>			_
STRIEN SUS-STREN	TEBT/REPORT MUMBER FAILED COMPONENT MANE	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	BITE TIME DIF	# 5 6 0	BITE PRI VENDOR NAME TIME DIF OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	A-88-DA-MISIF CIRCUIT BGAND	FAR 27-43230-5	620320	BAN DIEG YES	, C.	5/05	
FAILURE MODE-SHORT (ELECT), THE REPORTED TO BE BURNED, THE FAILUR RANGISTOR CASE MITHIN THE MODULE.	FAILUNE MOSE-SMORT (ELECT), THE SUND LOGIC METHERR FAILED DURING FUNCTIONAL TESTS. POTTED MODULE P/M 27-43187-5 MAS Reported to se bunned. The Failune was confirmed, The Failune was caused by a smort circuit setheem Pim 5 and The T Ansistor case within The Module.	DURING PUNCTIONAL TI LUNE WAS CAUSED BY A	ERTS, POTTE BHORT CIRC	D MODULE (* E	7-43567-5 MAS H S AND THE T	
CORRECTIVE ACTION-MODI NDEXING TAB ON THE TRAI 5. A WILAR TAPE 13 USES	CORRECTIVE ACTION-MODULES PRESENTLY BEING MANUFACTURED HAVE BEEN REDESLANED TO PRECLUDE THIS TYPE OF FAILURE. THE S DEXING TAB ON THE TRANSISTOR CASE HAS BEEN HOVED TO PROVIDE ADEQUATE CLEARANCE BETWEEN THE TRANSISTOR CASE AND PIN . A HYLAR TAPE IS USED TO PROVIDE ADDITIONAL INSULATION. ALL REMAINING STOCK OF OLD HODULES HERE SCRAPPED.	VE BEEH REDESLINED T DE ADEQUATE CLEARANC ALL REMAINING BTOCK	O PRECLUDE E BETWEEN T OF OLD HODI	THIS TYPE HE TRANSI LEG WERE	\$108 \$0.84	CASE AND PIN PED.	
AUTOFILOT - SQUARE - A /B	A-89-04-3133F COMECTOR	FAR E7-41356-821	620380	FACTORY	YE 3		
FAILURE MODE-STRUCTURAL. E. THE FAILURE WAS DUE TO MT IN ANY MANNER.	TURAL. A DISTORTED CUTPUT FROM THE GYROSCOPES WAS REPONTED. FAILURE AMALYSIS COMFIRMED THE FAILUR DUE 10 A BROKEN E WIRE ADAPTOR. THIS TYPE OF ADAPTOR READILY BREAKS, OPENIMG THE CIRCUIT, WHEN BE	GCOPES WAS REPORTED. PE OF ADAPTOR READIL.	FALLURE ANY BREAKS, O	PENING TH		ED THE FAILUR CUIT, MEN BE	
CORRECTIVE ACTION-THE R	CORRECTIVE ACTICH-THE 2 WIRE ADAPTOR WAS ELIMINATED ON ALL HARNESS TRAYS CONSTRUCTED AFTER 10-6-61, PER WAP 7601 CI 11532-70-1. NO FURTHER ACTION AT THIS TIME.	L HARNESS TRAYS CONS	TRUCTED AFT	ER 10-6-6	¥ .	18 144P 7801 CI	
AUTOFILOT - SQUARE - A/B GTRO PACKAGE	H6-99-04-5110F 2ATE 6YRO	FAR E7-04574-3	450310	2	¥63	YES HIMM, HOMETMEL NO L	
FAILURE MODE-OUT OF 19 CORRECTIVE ACTION-VOR RECURRENCE OF THIS TYM	F TOLERANCE-CAUSED BY INTERNAL MASS PHIFTING. «CHOOR HAS AGREED TO REVIEW AND IMPROVE CLEANING, CEMENTING AND SOLDERING TECHNISUES TO PRECLUDE TYPE FAILURE.	FTING. CLEANING, CENENTING	AND BOLDER	IM TECHN	190	1 TO PRECLUDE	
AUTOFILOT-SQUARE-A/B GYBO PACKAUE	A-9H-04-3183F AMPLIFIER-RESISTOP	FAR E7-4100g-805	#E0319	SCHILLIN NO	2 2		
FAILURE HODE-ELECTRICAL GPEN-A BERIES OF THE YAW GYNO SIGNAL AMPLIFIER. THE FAILU AS CAUSED BY A MAPCHE TEST VOLTAGE ERROR.	FAILURE MODE-ELECTRICAL GPEN-A BERIES OF NO-608 WERE RECEIVED DURING MAPCHE CHECKOUT. AMALYBIS REVEALED LOW 6AIN OF THE YAM GYRO SIGMAL AMPLIFIER, THE FAILURE MAS CAUSED BY RESISIOR R-28 DEING GYEN-CIRCUITED. THE RESISIOR FAILURE W S CAUSED BY A MAMCHE TEST VOLTAGE ERROR.	IVED DURING MAPCHE C Resistor R-20 Eeing	HECKOUT. AN	MLT818 RE TED. THE	VEAL (ID LOW GAIN OF	,
CORRECTIVE ACTION-UNKI	URK NOWN,						
						PAGE 0435	
	THE PARTY OF THE P						

11 24 1996

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	12024						1724			
VENDOR MANE		TEST WHEN THE TORQUER AMPLIFIER BEC HOTED- T-1 AND R-19 BURNED, TRANSIS WROVED HEAT SINK.	REARFOIT A BROKEN PHASE ON FAR CI-98-04	D BAFFLES IN TH		ACTUAL MODE OF FAILURE PRICK TO FAILURE ANALY		D THE FAILURE. R ARKEMED AND THE QUATE HEAT SIMK!	BEEN INCORPORAL	PAGE 0436
1 2 3 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		CORQUE:	YES TO CALLED TO	PORATE	<u> </u>	CTUAL RIOR 1	<u> </u>	ENE DINADE	H HAS	-
\$17E	FACTORY	1 7HE 1-1 ANO EAT 81H	AMR TTRIBU	INCOR	7 AC 108	NIRED P	ALTUS	7818 V LEADS V	X DESI	
VEHICLE		CE TEST WHEI RE HOTED- T	420315 C. FAILURE A	M. KEARFOTT	8 E0313	ACTORY CHECK	620313	LLING. ANALY TRANSISTOR (URE IS RELA'	ED HEAT SIN	
DIF DATA BOURCE	FAR ET-41378-805	DURING A CANISTER ACCEPTANCE TEST WHEN THE TORQUER AMPLIFIER BEC POLLOWING DISCREPANCIES NERE NOTED- T-1 AND R-19 BURNED, TRANSIS 16 ENUSS TRANSISTORS AND AN IMPROVED HEAT SINK.	FAR SE-41D02-809 AMR YES KEARFOTT S5-41D02-809 NO NO EXHIBITING A HIGH DRIFT RATE. FAILURE ATTRIBUTED TO A BROKEN PHASE CASE GROUND POST. FIVE SIMILAR CASES WERE REFORTED ON FAR CT-98-04	WARHUP AND COCL-DOS	E7-43229-3	OULE LEVEL DURING FA	FAR E7-41002-855	TINE, NO YAW DISPLACEMENT GYRO MULING. ANALYSIS VERIFIED THE FAILURE. R Censs) was severely burned. The transistor leads were darkemed and the Indicating overheating, the failure is related to inadequate heat sinki	ENSIS AND AN IMPROV	
TEST/REPORT NUMBER	A-99-04-3134F A-99-17:1ER-TRAHSISTOR	FAILED ER THE PORATI!	4-023F ENENT GYRO-MIRE HIT REJECTED FOR D THROUGH AT THE	V196D H	A-99-04-3206-F	FAILURE MODE-OUT OF TOLERANCE. FAILURE WAS NOT COMPINED. IR RECORDS INDICATE UNIT MAY MAYE BEEN REPAIRED PRIOR TO FAILURE ANALY. 118. CORRECTIVE ACTION-MOME.FAILURE WAS NOT COMPIRMED.	A-6N-04-3177F Amplifier-transistor	PRESCRIBED TINE, NO YAN ANSISTOR 85 (ENSS) WAS MAS CRACKED, INDICATING	ITOR EMASS HAS REPLACED TRANSISTOR ENSIS AND AN IMPROVED HEAT SIME DESIGN HAS BEEN INCORPORATE	
STATEN	SUB-STREEN AUTOFILOT-SAUARE-A/B STRO PACKASE	FAILURE MODE-FAIL DURING OPERATION-THE ITEM AME INCPERATIVE. UPON REMOVAL FROM THE CANISTITIONS &3 AND &6 MERE INCPERATIVE (ITTHE EMS39). CORRECTIVE ACTION-AMPLIFIER REDESIGNED INCOR	AUTOFILOT-SAUARE-A/B CT-98-0 6YRO PACKAGE DISPLAC FAILURE MODE-OPEN, ELECTRICAL. U 8 FLEX LEAD WHICH WAS ALSO BURNE -047F, -036F, -057F, -062F, -074.	CORRECTIVE ACTION-6D/C RE E GYRO NEAR THE FLEXLEADS.	AUTOPILOT - SAUMPE - A/B GYRO PACKAGE	FAILURE MODE-OUT OF TOLERANCE. WAS NOT RECORDED, FAILURE WAS 1818. CORRECTIVE ACTION-NOME, FAILURE	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE MODE-FAIL TO OPERATE AT ESISTOR REE IN THE EMITTER OF TRAD DRIVER TRANSFORMER, ET-04180-3, WE OF THE ENSSE TRANSISTOR.	CORRECTIVE ACTION-RESISTOR EN486	

SENERAL LINAMICS

18 JUN 1886

		DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBON	¥				
	BYSTER SUN-STRIES	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	SITE PRI		VENDOR NAME VENDOR PART NO	
AUTOPILOT-34 67RO PACKAGE	AUTOPILOT-NGUARE-A/B STRO PACKAGE	AR141-0-1-128/FC-4CO-04-188	COMPOSETE-FACTORY	1200 \$20310	FACTORY	3/93 OH		0 4 6
FAILURE	PAILUME MODE-PAIL DURING	DURING OPERATION. NUMEROUS ROLL TORQUING AND BIAS FUNCTIONS NERE UNSATISFACTORY DURING THE TEST.	AND BIAS FUNCTIONS	MERE UNBAT	IBFACTORY	3.00 INC	THE TEST.	
87.5 TEN	STRIEM EFFECT-INFROPER A	ROPER ANALOS SIGNALS, MUMEROUS ROLL TORQUINS AND BIAS FUNCTIONS MERE UNBATISFACTORY.	NG AND BIAS FUNCTIO	NO MERE UN	BATISFACT	ORY.		
WENTCLE CORRECT	EFFECT-COMPOSITE		CONDITION RECURRED OR POST-COMPOSITE TESTING. THE PITCH	O# PO\$1-CO	HPOSITE	E811M6.	THE PLICH	
100 SAT	APPLIFIER WAS FOR	BUCKOJI AMPLIFIER MAS FORMU TO BE RUJUSTED FOR GREATER INAN THE GYRO. THE PITCH BUCKOUT AMPLIFIER WAS ADJUSTED POR THE	UNITY WAIN RESULTING	400 W H H		1	2	
AUTOFILIST-SA GTRO PACKAGE	AUTOFILIST - SQUARE-AVE	AARE-OGAZ/P4-4CO-03-F1 DISPLACENENT 67RO	COMPOSITE-J FACT 55-41002-809	1040 62030\$	34	YES 60/C		1
PAILURE	HODE-DRIFT. THE	FAILURE MOSE-DRIFT. THE YAM DIAPLACEMENT SYRO INDICATED EXCERSIVE DRIFT DURING THE PLUS COUNT.	EASIVE DRIFT DURING	THE PLUS	COUNT.			
SYSTEM	SYSTEM EFFECT-IMPROPER AMALOG SIGNALS	AWALOG SIGNALS.						·····
WEHICLE	WENTELE EFFECT-NONE.							
CORRECT	CORRECTIVE ACTION-REHOWE	E CANISTER AND REPLACE. (FAR SP-98-04-023)	4-023)					1
AUTOFILOT EYRO PACK	AUTOFILOT-SQUARE-A/B	A-JA-GA-SIEBF Displacement Gyro Canibier	FAR 7-04250-1	460307	FACTORY	YES KEARFOTT NO 12506-24	F011	**
FAILURE	HODE-STRIKCTURAL	FAILURE HODE-BTRUCTURAL-INSPECTION BHOMED A DENTED END BELL: PROBABLY CAUSED BY OVERPRESSURIZATION OF THE \$YMO CANI	. PROBABLY CAUSED B	Y OVERPRES	SUNTRATIC	20 X	STRO CANE	
CORRECT	IVE ACTION-A FIBE	CORRECTIVE ACTION-A PIBERGLASS AND PLASTIC CAP HAS BEEN PROVIDED TO PREVENT DAMAGE TO THE END BELL.	VIDED TO PREVENT DA	MAGE TO TH	E END BEL	t.		
AUTOFILOT-SE	AUTOPILOT-SQUARE-A/B	A-BM-D4-BITIF CIRCUIT BOARD	FAR 27-41002-455	205030	SCHILLIN	TES ON		· · · · · · · · · · · · · · · · · · ·
FAILURE DISPLACE BHORT CH CALIBRA	FAILURE MODE-PAIL DURING DISPLACEMENT GYRO TORBUIN BHORT CIRCUIT CAUSED BY T CALIBRATION MESISTON INS	FAILURE MODE-FAIL DURING OPERATION. DURING MAPCHE CHECKOUT A NO-60 WAS RECEIVED ON CARD 323 WHICH CHECKS FOR PITCH DISPLACEMENT STRO TORGUING. FAILURE NOT CONTINUED, MOMEVER, SOLDER CONTANINATION WAS PRESENT. FAILURE CAUSED BY 717 BHOOF CIRCUIT CAUSED BY THE SOLDER OR 72/ TEST EQUIPMENT MALFUNCTION. THE SOLDER CONTANIMATION WAS INTRODUCED DURING CALIBRATION MESISTON INSTALLATION.	A NO-60 MAS RECEIVE SOLDER CONTAMINATIO FUNCTION, THE SOLDE	D ON CARD IN THE ST. T. CONTANTIN	SES WHICH	CHECKS.	FOR PITCH ED BY /1/ CED BURING	
COMPLET	IVE ACTION-60/C H	CORRECTIVE ACTION-50/C HAS INITIATED CORRECTIVE ACTION BY INSPECTING ALL CIRCUIT BOARDS FOR CONTAMINATION AFTER CAL	MAPECTING ALL CIRCU	IT BOARDS	TOR CONTA	MI NA TION	AFTER CAL	T
							PAGE 0437	-1

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DIPPICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

BYBTEN BUB-BYBTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE BE	BITE PRI	VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	
IBRATION RESISTORS ARE SO	ARE SCADENED INTO PLACE, SINCE PERSONNY 1962.	. 204				******
AUTOFILOT-SQUARE-A/B	37-40-04-31377 4-10-22-12	FAR 27-41703-809	1120 WTR 620309	YES	HENNEAPOLIS. H OMETNELL	******
FAILURE MODE-OPEN (ELECT) THE PLICH RATE EYRO COULD EMG. THIS MINDING IS MADE	FAILURE MOSE-OPEN (ELECTRICAL), DURING APCHE TESTS NO-GOS NERE RECEIVED FOR RATE GYRO TORGUING, FAILURE CONFIRMED. The pitch rate syro could not be torgued, the Pailure was due to an open circuit in the Pitch Rate Gyro torguer wind Eng. This winding is made for the Vendor BY Electro-Products.	ERE RECEIVED FOR RA' E TO AN OPEN CIRCUI'	E 6VRO TORGUI	MG. FAIL! RATE CY	URE CONFIRMED.	
CORRECTIVE ACTION-UNKNOW	UNKNOWN. THE VENDOR: HINNEAPOLIS HOMEYMELL, HAS AGREED TO SURVEY THE TORGUER WINDINGS RECEIVED FR. AND OBTAIN ANY CORRECTIVE ACTION NECESSARY TO PREVENT FUTURE FAILURES OF THIS TYPE.	L, HAS AGREED TO BUT RY TO PREVENT FUTURE	IVEY THE TORGE FAILURES OF	ER WIND!	HGS RECEIVED FR E.	
AUTOFILOT-SQUARE-A/B	5P-9D-D4-3189F 67RO-D13PLACEMENT	FAR E7-4100E-881	1120 WR 620305	YES	YES KEARFOTT	*******
FAILURE MODE-BTRUCTURAL. TECTOR /SHRD/. THE FAILUR M MOTOR LUBRICANT.	FAILURE HODE-BTRUCTURAL. DURING MISSILE CHECKOUT, THERE WAS A REPORTED ABSENCE OF THE 28 VOC FROM THE SPIN MOTOR DE ECTOR /SHED/. THE FAILURE WAS INE TO A BLOW RUMMING YAM DISPLACEMENT GYRO BPIN MOTOR CAUSED BY DEPLETION OF THE SPI 5 MOTOR LUBRICANT.	A REPORTED ABSENCE PLACEMENT GYRO BPIN	OF THE 28 VOC HOTOR CAUSED	FROM THE	E SPIN NOTOR DE TION OF THE SPI	
CORRECTIVE ACTION-VENDOR . A NEW BEARING LUBRICAN INCORPORATING THE NEW LU	CORRECTIVE ACTION-VENDOR STUDYING SPIN MOTOR FAILURES TO DETERNINE EXACT CAUSES AND TO ESTABLISH CORRECTIVE MEASURES. A MEM SEARING LUBRICANT IS UNCER INVESTIGATION AND A LIMITED MARGER OF NEW GYROS AND PRESENTLY BEING MANUFACTURED INCORPORATING THE NEW LUBRICANT.	TERHINE EXACT CAUSES TED HAMBER OF HEM S	HO TO ESTAG	LISH COR	ESTABLISH CORRECTIVE HEASURE PRESENTLY BEING MANUFACTURED	
AUVOFILOT-SQUARE-A/B	CT-98-04-015F	FAR 53-41002-808	GEOSOS ETR	22		236266
PAILURE MODE-OUT OF TOLERANCE TO YEST EAUIPMENT DIBGREPANCY.	p tolerance. Unit rejected for pitch blaving benbitivity being above nominal. Pailure attributed Ibcrepancy.	ING BENBITIVITY BEEL	6 ABOVE NOHIN	ML. FAIL	URE ATTRIBUTED	
CORRECTIVE ACTION-NOME.	NO PAILURE.					
AUTOFILOT-SQUARE-A/B SYNO PACKAGE	A-99-04-3123F Dibelacement ftro	FAR 7-04250-8	GEOSOL FACTORY		YES KEARFOTT NO C70-2504-000	*****
FAILURE MODE-CONTANINATION CONTANINATION	FAILURE MODE-CONTANINATION, 2 DISPLACEMENT 67806 FAILED BY STICTION-POSSIBLY DUE TO BINDING CAUSED BY PRICTION OR MTANIMATION.	STICTION-POSSIBLY DE	AE TO BINDING	CAUSED .	FRICTION OR C	
CORRECTIVE ACTION-VENDOR	WENDOR HAS NOTIFIED. A STRO WILL BE DESIGNED USING A NEW TYPE	MED USING A MEW TYPE	OF BEARING.			
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

STSTEN SUB-STSTEN	TEST/REPORT NUMBER FAILES COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE S	SITE PRI TIME DIF OTH	I VENDOR NAME H VENDOR PART NO	
AUTOPILOT-SQUARE-A/B	A-80-04-3145F 64RO-D2-8FLACEMENT	FAR 7-04250-8	620301 FAC	FACTORY YES	\$ KEARFOTT CTO-2506-000	691249
FAILURE MODE-OUT OF TOLERANCE. DUE HE EVRO WE HE REPORTED PAILURE. THE EVRO WE OR THE REPORTED STICTION FAILURE WE	IING FUNCTIONAL TESTS 18 FUNCTIONALLY TESTED 18 FOUND IN TESTING ON	THE GYRO EXHIBITED STICTION, FAILURE ANALYSIS DID) AND FOUND TO BE IN TOLERANCE FOR ALL PARAMETERS.) TEARDOWN,	TION, FAILURE ERANCE FOR AL	ANALYBI L PARANE	S DID NOT CONFIR TERS. NO CAUSE F	
CORRECTIVE ACTION-UNKIK	CORRECTIVE ACTION-UNKNOWN. THE MEATER GINGAL ASSENGLY WAS RETURNED TO THE VENDOR FOR HIS AMALYSIS.	LETURNED TO THE VEND	OR FOR MIS AN	AL 7319.		
AUTOPILOT-SAUARE-A/B GTRO PACKAGE	A-99-04-3166C CIRCUIT BOARD	FAR 27-41486-3	GEORES FAC	FACTORY YES	3/03 6	991242
FAILURE MODE-ERRATIC OPERATION, THE ENVED. FAILURE HAS NOT CONFIRMED, A TTAL TO FAILURE AMALTRIS.	NE CINCUIT	BOARD FAILED DURING FACTORY TESTING WHEN AN INTERMITTENT OUTPUT WAS OBS FACTORY RECORDS REVEALED THAT THE PART HAD BEEN REPAIRED PRIOR TO SUBMI	G WEN AN INT PART HAD BEEN	crmitten Repaire	T OUTPUT MAS CASS	
CORRECTIVE ACTION-UNKNOWN.	į					
AUTOPILOT-SAUARE-A/B	A-99-04-3134F GYRO	FAR 7-04250-3	GEOZZZ FAC	FACTORY YES		992046
FAILURE MODE-FAIL TO OPERATE AT THE FAILURE MHICH WAS CAUSED BY TION BREAKDOMN RESULTING ARCING	FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TINE, A SPIN MOTOR FAILED TO ATTAIN SYNCHONOUS SPEED, ANALYSIS CONFIRMED THE FAILURE WHICH WAS CAUSED BY AN OPEN-CIRCUIT IN THE A PHASE OF THE STATOR WINDINGS PROBABLY DUE TO WINDING INSUL ATION BREAKDOWN RESULTING ARCING WHICH HELTED THE WIRE,	IOR FAILED TO ATTAIN	SYNCHONOUS S. INDINGS PROBA	PEED. AN BLY DUE	ALYSIS CONFIRMED TO MINDING INSUL	
CORRECTIVE ACTION-FAULTY STATOR WI SURVEILLANCE OF THIS PART.	IY STATOR WINDING MAS SHOWN TO THE VENDOR, VENDOR AGREED TO INCREASE HIS QUALITY CONTROL AND	HOOR, VENDOR AGREED	TO INCREASE	HIS BUAL	ITY CONTROL AND	
AUTOFILOT-SAUMRE-A/B	9F-9D-04-3135F GTRO-DI 8FLACEMENT	FAR 27-41002-891	11ED WTR	¥ 2	YES KEARFOTT NO	
FAILURE HODE-CONTANINATION, DURING D. IN ADDITION TO STICTION, FURTHER T A SHALL PARTICLE OF SOLDER CONTAN ND MOULD CAUSE HIGH DRIFT.	FAILURE MODE-CONTAMINATION. DURING APCHE TESTS NO-GOS MERE RECEIVED INDICATING STICTION IN A SYRO. FAILURE CONFIRME D. IN ADDITION TO STICTION, FURTHER TESTING REVEALED ERRATIC TORQUING LINEARITY DISASSENBLY OF THE SYRO REVEALED THA T A SMALL PARTICLE OF SOLDER CONTAMINATION CAUSED THE STICTION. TWO PLEX LEADS FOR SPIN MOTOR POWER WERE DISTORTED A MD MOULD CAUSE HIGH DRIFT.	RECEIVED INDICATING TORQUING LINEARITY. ON: TWO PLEX LEADS !	STICTION IN DISASSENDLY (FOR SPIN MOTOR	A SYRO.	IVED INDICATING STICTION IN A GYRO, FAILURE CONFIRME GUING LINEARITY DISASSENBLY OF THE GYRO REVEALED THA TWO PLEX LEADS FOR SPIN NOTOR POWER WERE DISTORTED A	
CORRECTIVE ACTION-THE VI M. THE FLEX LEAD PROBLEN	CORRECTIVE ACTION-THE VENDOR HAS BEEN NOTIFIED AND HE HAS STATED THAT ALL EFFORTS ARE BEING HADE TO PREVENT STICTIO I. THE FLEX LEAD PROBLEM HAS RESULTED IN REDESIÓN OF GYROG TO CONTROL FLEX LEAD FLOTATION MATERIAL FLOM AND PREPARAT	STATED THAT ALL EPFORTS ARE BEING MADE TO PREVENT STICTIO TO CONTROL FLEX LEAD PLOTATION MATERIAL FLOW AND PREPARAT	RTS ARE BEING PLOTATION MA'	MADE TO TERIAL FI	PREVENT STICTIO	
					PAGE 0439	

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*****	TEST/REPORT NUMBER	DIF DATA BOURCE	VENTOLE	3718	PRI VENDOR	OR NAME	
808-878TEN	FAILED COMPONENT NAME	PART NUMBER	DATE DIF	11ME 01F	OTH VENDO	TIME DIF STH VENDOR PART NO	
TON OF NEW HANDLING RE	REGUIRENENTS.						*****
AUTOFILOT-SEUARE-A/B GYRO PACRAGE	A-88-04-3199F 6780-018PLACEMENT	PAR 7-04£50-\$	\$12029	BAN DIEG	SAN DIEG YES KEANFOTT O NO C70-2506	KEAMPOTT C70-2506-000	84 09 4 8
FAILURE MODE-ATRUCTUR E MAS CONTRAED. 17 MA RELOAD. THE LOSS OF PR	URAL-THE RATE-INTEGRATING SYNO SPIN MOTOR NOALD INTERNITTENTLY 60 OUT OF SYNCHRONISM, THE FAILUR MAS CONCLUDED PROH THE PAILURE AMALYSIS THAT THE FAILURE MAS DUE TO LOSS OF SPIN MOTOR SEARING PPRELOAD WAS DUE TO A MECHANICAL SHOCK RECEIVED DURING HANDLING.	DTOR NOWLD INTERNITTE B THAT THE FAILURE W RECEIVED DURING HAND	NYLY 60 OUT	T OF BYNCH	RONISH, T IN MOTOR	SPIN NOTOR SEARING P	,
CORRECTIVE ACTION-LANINOMA.	NOMe.						
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-89-04-3134F CIRCUIT BOARS	FAR 27-41378-805	820212-6 FACTORY 20214		33		000566
FAILURE WODE-OUT OF TO L REVEALED THAT THE TE	TOLERANCE. GUTPUT DISTORTION WAS REPORTED. FAILURE NOT CONFIRMED. A CHECK MITH FACT TEST EQUIPMENT HAD BEEN MALFUNCTIONING AND THAT THIS COULD HAVE CAUSED THE FAILURES.	RTED. FAILURE NOT CO.	METRHED. A HAVE CAUSE	CHECK WIY 3D THE FAI	H FACTORY LURES.	MITH FACTORY PERSONNE. FAILURES.	
CORRECTIVE ACTION-TEST EQUIPMENT REPAINED.	T EQUIPMENT REPAINED.						
AUTOFILOT-SQUARE-A/B	A-BA-O4-3130F CANISTER-VALVE-CHARGE	FAR 27-45045-9	1.620207	SYCAHORE YES	7£3 NO		*2160
FAILURE MODE-LEAK-EXTI MAS TESTED IN FAILURE, RESSURIZATION TO 14 PS	XTERNAL, CANISTER WAS CRRERVED TO DE LEAKING GNE THROUGH THE SCHRADER PMEUJATIC VALVE. THE PART E AMALYSIS IS DAYS AFTER THE CRIGINAL FAILURE. THE CANISTER STILL HAD 3 PSIG PRESSURIZATION, REP PSIG AND TESTING FOR LEAKAGE FAILED TO CONFIRM THE FAILURE.	EAKING GHE THROUGH TH FAILURE, THE CANISTE CONTRH THE FAILURE	HE SCHRADER	TARCIDATI	C VALVE.	THE PART TION, REP	
CORRECTIVE ACTION-LANKWOOMY.	NOMA.						
AUTOFILOT-SAUARE-A/B GTRO PACRAGE	A-86-04-3154P AMPLIFIER-MACHETIC, P/HTCTC-1,	FAR 27-41002-838	77 620206	CTR	ves Or		*16180
FAILURE MODE-ELECTRICA TS RMS. THE FAILURE MA DEFECTIVE, THE MAGMETIA M THE AMPLIFIER.	FAILURE MOG-ELECTRICAL OPEN, THE ROLL DISPLACEMENT FINE HEATER VOLTAGE REPORTEDLY FLUCTUATED BETWEEN D AND 319 VOL TS RMS. THE FAILURE HAS CONFIRMED, TROUBLESHOOTING REVEALED THAT THE HAGHETIC AMPLIFIER CONTROL UNIT F/N TCTC-3 HAS DEFECTIVE. THE MAGNETIC AMPLIFIER COLLD NOT BE DEPOTTED. THE MOST PROBABLE CAUSE OF FAILURE IS AN OPEN HINDING WITHE N THE AMPLIFIER.	HEATER VOLTAGE REPOR D THAT THE MAGNETIC . HE MOST PROBABLE CAU	TEDLY PLUCT AMPLIFIER C NE OF PAILU	TUATED BET CONTROL UN RE 18 AN	HEEN D AN 17 P/N TC OPEN HIND	70-1 MS	
CORRECTIVE ACTION-NO	CORRECTIVE ACTION-NO RECOMMENDED ACTION BECAUSE EXACT CAUSE OF FAILURE COULD NOT BE DETERNINED.	SE OF PAILURE COULD	NOT BE DETE	RHINED.			
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AINSORME

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VEHICLE SITE PRI VENDOR MAME DATE DIF OTH VENDOR PART NO	WO JRAIDIAR	YES REARFOTT NO TESOS-EA IY. THE PAILURE NO	CURRENT PRODU RATING A NEW I Y SLOW WITH A HIS WAS TERNET	40/C
9 0 8 10		5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10 10 10 10 10 10 10 10 10 10 10 10 10 1	33 5
11 ME DI	FACTORY	PACTORY THE PACTO	AAR AAR IN RAIE IN	ETR ETR
VEHICLE DATE DIF	62 0204	SECUSAL TEST IN	GE0130 GE0130 ALAVIME DAMAGED 1	LURE PRO
DIF DATA BOUNCE PART NUMBER	FAR ET-D4874-8 MIBITED BTICTION.	FAR 7-04250-1 DURING A FUNCTIONAL TYPE OF 6YRO 18 NO	FAR SE- BATC FAR SS-4100E-805 TRANSISTOR AND, A	PAR FAR 87-41008-863 8NAL AMPLIFIER, PAI NUMAN ERROR.
TEAT/REPORT MUMBER FAILED COMPONENT MANE	TOPILOT-SQUARE-A/B 6-98-04-3807-F FAR RO PACKAGE RO PACKAGE ROLLINE MODE-OUT OF TOLERANCE, DURING BENCH TEST THE UNIT EMIBITED STICTION. CORRECTIVE ACTION-MOME, FAILUME NOT CONFIRMED.	TOPILOT-SAUME-A/B A-89-D4-3141F FARE BEG131 FALTORY YES KEARFOTT RO PACKAGE GYNO-D13PLACEMENT P-04250-1 R-04250-1 MO 72504-RA NO 72504-RA PALLURE MAS FAILURE MAS NOT CONFIRMED. DIBASSENDLY OF TOLERANCE. THE SYRO ESHIBITED STICTION DURING A FUNCTIONAL TEST IN THE FACTORY. THE FAILURE MAS NOT CONFIRMED. DIBASSENDLY OF THE GYRO MAS NOT DONE AS THIS TYPE OF SYRO IS NO LONGER MANUFACTURED.	CORRECTIVE ACTION-THE VENOR HAS STATED THAT ALL EFFORTS ARE MADE TO KEEP STICTION AT A LOW LEVEL IN CURRENT PRODUCTION OF THE CTO-2304-000 GVRO UNION REPLACED THE TESO4-EA GVRO. THE VENDOR IS BUILDING A GVRO INCORPORATING A NEW PI VOT AND JENEL BEARING. UTOPILOT-SQUARE-A/B CT-98-04-009F FAR GEDISO AM YES STALLUTE MODELAL PERMITTERS SS-4100E-805 NO NOT IMPUT. FAILUTE MAS ATTRIBUTED TO A BURNED RESISTOR AND TRANSISTOR AND, A DAMAGED TRANSFORMER. THIS WAS TERNED A THERMAL.	CORRECTIVE ACTION-THE TORGUEN AND BIGNAL ANPLIPTERS WERE REDESIGNED. INCLUDING DIFFERENT TRANSISTORS AND IMPROVED H UTOFILOT-SQUARE-A/S RA-96-04-3073-F FAR 1210 ETR NO 60/C AMPLIFIER AMPLIFIER FAILURE HODE-FAIL DURING OPERATION. ZERO GUTPUT FROM YAM SIGNAL AMPLIFIER. FAILURE PROBABLY DUE TO HISAPPLICATION OF 115 VAC 400 CPS 70 THE AMPLIFIER PROBABLY BY HUMAN ERROR.
NATEN BLB-B-B-B	ANTOPILOT-SQUARE-A/B A-8-04-3207-F STRO PACKASE FAILURE MODE-OUT OF TOLERANCE. DURING BENCH TE CORRECTIVE ACTION-HOME, FAILUME HOT CONFIRMED.	AUTOFILOT-SAUARE-A/B GYRO PACKAGE FAILURE HODE-OUT OF TOLI NOT CONFIRMED, DIBASSEN	CORRECTIVE ACTION-THE W TION OF THE CTO-2908-000 WOT AND JENEL BEARING. AUTOFILOT-SQUARE-A/B GTRO PACKAGE FAILURE MODE-OUT OF TOLI WOLT IMPUT, FAILURE MAS A THERMAL RUMMAT.	CORRECTIVE ACTION-THE TO EAT SINKS. AUTOFILOT-SQUARE-A/S GYRO PACKAGE FAILURE MODE-FAIL BURING F SIS VAC 400 CPS TO THE

CORRECTIVE ACTION-UNKNOWN.

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME

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PRI VENDOR NAME OTH VENDOR PART NO	KEARFOTT	OT COMPINED. P	YES KEARFOTT NO CTO	E COFTANED DUE	5/03	OF 0.378 DEGREES/VOLT/SEC NAX A TO TEST SET MALPUNCTION DURING	TES HOMETMELL NO	TRICALLY BHORTE	/8 INCH FROM TH	PASC 0418
2 5 2 5	22	7 7	<u> </u>	AILUR	33	CAREES THALL	l	CLEC	5	
31.12 20.24 10.24	ETR E	TE. PAIL	CTR	J-03344	ETR	0.37e DE 7887 eE1	FACTORY	ME FOUND	E 0F 1/1	
VEHICLE SITE	420183	MAVING RA	1090		40E 620113	VALUE, OF NB DUE TO	311036	CB LEAD W	A DISTAIN	
DIF DATA SOURCE	FAR 27-41002-015	RANCE PITCH PROGRAM .	7AR E7-4100E-859	TAM DISPLACEMENT 67RO	FAR E7-4100E-863	NITED A PITCH BLAVING HISTER, THE FAILURE M	FAR 27-04574-3	URING CHECKOUT, TORBU	OT IN THE BLEEVING AT	
TEAT/REPORT NUMBER	A-98-04-3087-F 67RO-DISPLACEMENT	FAILURE MOE-OUT OF TOLERANCE. UNIT EXHIBITED OUT OF TOLERANCE PITCH PROGRAM BLAYING RATE. FAILURE NOT CONFIRMED. OBABLE CAUSE WAS SITE CHECKOUT EQUIPMENT ERROR. CORRECTIVE ACTION-NEW CHECKOUT EQUIPMENT INSTALLED AT BITE.	H6-98-04-3094-F 67RO-D18PLACENDY-BEARING	FAILURE MODE-FAIL DURING OPERATION-SMED LIGHT INDICATED YAM DISPLACEMENT GYRO NAS BELOW SPEED-FAILURE CONFIRMED DUE TO BREAKDOMM OF ONE OF THE SPIN MOTOR BEARINGS. CORRECTIVE ACTION-VEDGOR STARTED USING NEW TYPE OF LUBRICANT IN GYRO BEARINGS.	A-98-04-3076-F AMPLIFIER	OF SPECIFICATION OR TOLERANCE-UNIT ENHIBITED A PITCH SLAVING VALUE OF 0.378 DEGREES/VOLT/SEC MAX AND MALFUNCTION OCCURRED IN THE GYRO CAMISTER. THE FAILURE WAS DUE TO TEST SET MALFUNCTION DURING MA. M. - TEST EQUIPMENT REPAIRED AND REVALIBATED.	H6-A9-O4-3043 GVRO-RATE-WIRING	IELECT). INTERNITTENT TORBUIMS RATE DURING CHECKOUT. TORBUER LEAD WIRE FOUND ELECTRICALLY SMORTE	CORRECTIVE ACTION-VENDOR REDESIGNED MIRING BY TYING A RHOT IN THE SLEEVING AT A DISTANCE OF 1/2 TO 3/8 INCH FROM TH Terminal.	
AYDYEN ATEN	AUTOFILOT-SQUARE-A/B STRO PACKAGE	FAILURE MODE-OUT OF TOLI ROBABLE CAUSE MAS SITE CI CORRECTIVE ACTION-NEW CI	AUTOPILOT-SQUARE-A/B	FAILURE MODE-FAIL DURIN TO BREAKDOM OF OME OF CORRECTIVE ACTION-WENDO	AUTOFILOT-SAUARE-A/B GYRO PACKAGE	FAILURE HODE-OUT OF SPECIFICATION OR TOLER LLOWABLE IS 0.375. NO MALFUMCTION OCCURRED FACTORY CALIBRATION. CORRECTIVE ACTION-YEST EAUTHWENT REPAIRED	AUTOFILOT-SQUARE-A/B	FAILURE MODE-SHORT (ELE D TO GYRO CAME.	CORRECTIVE ACTION-VENDO	

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18 JUN 1866	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBON	¥		
878)EM 818-878H	TEST/REPORT HUNGER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE BITE DATE DIF THE OFF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SEUVAE-A/B STRO PACKASE	A-88-04-3082-P 67RO-D18PLACENENT	* AR 27-41002-855	SECTION ETR	YES KEARFOTT NO	:
FAILURE MODE-FAIL DURING OT BE DETERMINED.	JEING OPERATION-ROLL GYRO REJECTED FOR STICTION. FAILURE WAS CONFIRMED. CAUSE OF PAILURE COULD	ITICTION. FAILURE M	S CONTINED. CAUSE	OF PAILURE COULD IN	
CORRECYIVE ACTION-UNKHOOM	* .				
AUTOFILOT-SALARE-A/B GYRO PACKAGE	H6-99-04-3071F Gyro-rate-bearing	FAR 27-41002-639	1090 ETR 620109	YES MORTHELL NO	047740
FAILURE MODE-STRUCTURAL.	FAILURE MODE-STRUCTURAL, SAMED NO-60 INDICATED. PITCH 6TNO SPIN MOTOR FAILURE DUE TO BURNED AND PITTED BEARING.	PIN NOTOR PAILURE O	IUE TO BURNED AND PI	TTED BEARING.	
CORRECTIVE ; CTICH-UNKNOW R BEARINGS AME PROPERLY L.	CORRECTIVE (CITCH-UMENOM), VENDOR NOTIFIED AND REQUESTED TO PROVIDE RETTER QUALITY CONTROL. R BEARINGS ARE PROPERLY LUBRICATED, NENDOR CONCLUDED THAT PAILURE IS OF RANDON TYPE.	PROVIDE RETTER QUA	CONTROL	TO INSURE GYRO SPIN MOTO	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A99-04-3082-F Affler	FAR 27-41676-5	Agosos FACTORY	OH.	
FAILURE MODE-OUT OF SPEC UT OF TOLERANCE-FUNCTIONAL EST EAUTPHENT.	FAILURE MODE-OUT OF SPECIFICATION OR TOLENANCE-THREE PITCH SIGNAL AMPLIFIERS WERE REJECTED IN CHECKOUT FOR OUTPUT UT OF TOLERANCE-FUNCTIONAL TESTS DID NOT COMFIRM FAILURE-REPORTED FAILURES WERE DUE TO FAULTY SLIP RING ON FACTORY EST EAUTPMENT.	SIGNAL APPLIFIERS V CRIED FAILURES WERE	ERE REJECTED IN CH : DUE TO FAULTY BLIV	CROUT FOR OUTPUT O	
CORRECTIVE ACTION-BLIP R	CORRECTIVE ACTION-BLIP RING ON PACTORY TEST EQUIPMENT LAS REPAIRED AND VALIDATED.	CPAIRED AND VALIDAT	3 .		
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-98-04-3131F GYRO-BATE	FAR 27-45045-5	6E0103	ž.	***************************************
FAILUME NODE-OPEN ELECTRI VED NNS 705 MILLIVOLTS. N EMERATOR SECONDARY MALL CO	FAILURE KODE-OPEN ELECTRICAL. DURING TESTS THE PITCH RATE GYRO CUTPUT WAS COSERVED TO BE EKCESSIVE. THE VALUE COSER Ved was tod millivolts. Maximum allomable is 250 millivolts. Failure amalysis revealed a broken wire in the sighal s Emekator secchdary mall compusating winding.	YRO CUTPUT WAS COSE PAILURE AMALYSIS N	RVED TO BE EXCESSIV EVEALED A BROKEN M	K. THE VALUE CRREN RE IN THE BIGHAL 6	
CORRECTIVE ACTION-THE VEH	CORRECTIVE ACTION-THE VEHDOR WAS NOTIFIED OF THIR PROBLEM AND MAR AGREED TO INSURE A MORE ADEAUATE GUALITY CONTROL Rogarm.	ND MAR AGREED TO IN	BURE A MORE ADEAUAT	E. QUALITY CONTROL	·
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18 JUN 1988

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DIFFICULTIES REVI	EVIEW-AUT	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE STARFORT NAME DIF DATA SOURCE VED COMPONENT NAME PART NUMBER D	VEHICLE SITE PRI DATE DIF TIME DIF OTH	8176 1146 017	VENDOR I	MAN TAN	
AUTOFILOT-SQUARE-A/B	H6-98-04-3048 AMPL 271ER-RE9197OR	FAR 27-41002-859	1000	15	YEB		•••137
FAILURE MODE-ELECTRICAL TO INTENTITIBATLY OFEN RE CORRECTIVE ACTION-FOLK IN	FAILURE MODE-ELECTRICAL OPEN, REJECTED DURING CHECKOUT WHEN YAW DISPLACEMENT 67RO COULD MOT BE TORGUED. FAILURE DUE TO INTEMITTENTLY OPEN RESISTOR. **CORRECTIVE ACTION-POAR NEW PORMING TOOLS FURNISHED PRODUCTION TO FORM RESISTOR LEADS WITHOUT STRAIN DURING ASSEMBLY ACTION-POAR NEW FURNISHED PRODUCTION TO FORM RESISTOR LEADS WITHOUT STRAIN DURING ASSEMBLY	N YAN DISPLACEMENT 6	TRO COULD I	OT BE TO	RGUED. FAILUM IN DUMING ASS	200 H	
	AE61-1273/LZ-401-00-114	7.16HT	1140	# # # # # # # # # # # # # # # # # # #	YES 60/C		
FAILURE MODE-ERRATIC OFF ED DURING THE LATTER 49 S ILDUF, RATE GYROS LOCATED	FAILURE MODE-ERRATIC OMENATION. A BUILDUP OF THE MISSILE FIRST LATERAL BENDING MODE AT 3.0 TO 4.0 CP3 MAS ENCOUNTER ED DURING THE LATTER 49 SECONDS OF BOOSTER PHASE. NOWE OF THE PREVIOUS TEN ATLAS/AGENA PLIGHTS MAD A BENDING MODE BU ILDUM. RATE GYROS LOCATED AT STAITON 678.	IRBT LATERAL BENDING HE PREVIOUS TEN ATLA	HODE AT 3	0 TO 4.0	CPS MAS ENCO	DE BU	
CLE CPTECT-NOME. PLI	WENTCLE EFFECT-NOME, PLIGHT CONTROL STREEM MAINTAINED STABILITY.	11.17.					
CORRECTIVE ACTION-60/C B BENDING ANTIMODE AT THIS SUBSEQUENT ATLAS/ASENA NG MODE STABILITY.	CORRECTIVE ACTION-6D/C STUDIES INDICATED THAT THE LOCATION OF THE BATE GYROS AT STATION 675 WAS VERY MEAR THE FIRST BENDING ANTIMODE AT THIS TIME OF PLIGHT AND THAT THE PITCH CHANNEL SHOULD, THEREFORE, BE RELATIVELY STABLE, HOMEVER, SAUSSEQUENT ATLAS/ASEMA PLIGHT RESULTS EVENTUALLY LED TO RELOCATION OF RATE GYROS TO STATION 475 FOR IMCREASED BEND ING MODE STABILITY.	OF THE BATE 67809 A CHANNEL SHOULD, THE ELOCATION OF NATE 67	T STATION OF REFORE, BE	RELATIVE	ERY MEAR TWE LY STABLE, MC FOR INCREASED	FIRST MEVER BEND	
AUTOFILOT-SQUARE-A/B GYRO PACKACE	HG-90-24-3045 AMPLIFIER	FAR E7-41002-859	1090	E	YES NO		09190
FAILURE MODE- ERRATIC OPERATION-YAW BLAY CORRECTIVE ACTION-CALIBRATION PROCEDURE APPOITS AND LIMIT TORBUING TIME	FAILURE MODE- ERRATIC OPERATION-YAW BLAVING OUTPUT MISM-PITCH BLAVING OUTPUT ERRATIC BUT NOT CONFIRMED AT 80. Corrective action-calibration procedure for the Yaw Amplifier 'was reviewed and corrected. Etr advised of Proc	TON BLAVING CUTPUT E	RRATIC BUT	NOT COM	IRMED AT 80. 13ED OF PROCEDURE	¥ 50	
AUTOFILOT - SQUARE - A/B GYRO PACKAGE	A-98-04-2033 6YRO-01-8PLACEMENT	FAR E7-41:00E-688	011110	CTR	7E3		•••
URE HODE-OPENIELECT) IN 27 ON TERMINAL BO	FAILURE MODE-OFEMIELECT) PITCH DISPLACEMENT SYRO COULD NOT BE TORBUED. PIN 11 OF PITCH SYRO FOUND ERROMEOUSLY WIRED TO PIN 17 ON TERMINAL BOARD UNDER DISPLACEMENT GROUP.	BE TORAUED. PIN 11.	Q* #17CH	IRO POUND	ERROMEGUBLY	93 25	
CCTIVE ACTION-TEST BI	CORRECTIVE ACTION-TEST SETS IN PACTORY MODIFIED TO ETR CONFIGURATION.	TEURATION.					

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9901 WIT 82	DIFFICULTIES REVIEW-AUTOFILOT	OPILOT EYSTEN-AIRBORNE				_
SYSTER SUB-SYSTEM	TESTARFORT MUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	11 K 01 F	PRI VENDOR MANE OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-B6-04-3036-F Breid-Circult Board	FAR R7-45208-801	012110	SYCAHORE	YES 60/C	:
FAILURE MODE-OUT OF TOLE	FAILUME MODE-OUT OF TOLEMANCE, LOW BAND OUTPUT VOLTAGE RECORDED DURING CHECKOUT, CAUSE OF FAILUME NOT ISOLATED.	CORDED DURING CHECKON PAILURE ANALYBIS PRE	T. CAUSE OF	FAILURE ATIME THE	NOT ISOLATED.	
AUTOFILOT-SQUARE-A/B GYNO PACKACE	H6-A9-D4-3042 GYRO-RATE	FAR R7-04574-3	41217	FACTORY	NO HONETVÆLL.	2006
FAILURE MOE-FAIL DURING R DE-MEMETIZATION MAS DET	DURING OPERATION-LOW BARD OUTPUT VOLTAGE CAUSED BY DEMANETIZATION OF THE BARD MACHET-NO CAUBE FO. WAS DETERHINED.	CAUSED BY DEMANETI	ZATION OF	14E 1140	MGNET-NO CAUSE FO	
CORRECTIVE ACTION-LAKINDA	CORRECTIVE ACTION-LAKNOWN. INVESTIGATION OF CAUSE OF DEMACRETIZATION OF	METIZATION OF BURD N	BURD MACHET TO BE CONTINUED.	CONTINU	В.	
AUTOPILOT-SQUARE-A/B	A-90-04-3100-F CIRCUIT BOARD	FAR 27-41002-855	913119	æ 5	40 60/C	7.00
FAILURE MODE-FAIL TO OPF -CHECK MODULE, NO CAUSE O	. TO CPERATE AT PRESCRIBED TIME- DURING MAPCHE TEST SHED QUIPUT MAS OWDC. PAILURE CONFIRMED IN SELF CAUSE OF MODULE FAILURE COULD BE FOUND DUE TO DESTRUCTION OF COMPONENTS DURING DEPOTTING.	NPCHE TEST SHILD CUTPU UE TO DESTRUCTION OF	T MAS OVDC.	PAILURE DURING OF	CONTRHED IN BELF POTTING.	
CORRECTIVE ACTION-60/C	CORRECTIVE ACTION-60/C IS CONTIMUING INVESTIGATION OF SELF	T CHECK MODULE PROBLEM.	÷			
AUTOFILOT-SQUARE-A/B 6YRO PACKAGE	A88-04-3098-F A4#L1F1ER	FAR 27-41379-803		PACTORY	50 G	2 1
FAILURE HODE-ERRATIC OF RMED IN UNIT. REPORTED FA	FAILURE MODE-ERRATIC OPERATION-SIGNAL ANPLIFIER EXMIBITED INTERNITTENT RATE GAIN OUTPUT. FAILURE COALD NOT BE CONFI RMED IN UNIT. REPORTED FAILURE PRODABLY DUE TO FACTORY TEST EQUIPMENT MALFUNCTION.	INTERNITTENT RATE GA T EQUIPMENT MALFUMCTI	IN OUTPUT. ON.	FAILURE	COLLD NOT BE CONTI	~~~
CORRECTIVE ACTION-FACTOR	CORRECTIVE ACTION-FACTORY AUTOPILOY TEST SET REPAIRED AND VALIDATED.	VAL I DA TED.				
AUTOFILOT-SQUARE-A/B 67RO PACHAGE	A-98-04-3072-F 67RO-RATE	FAR 87-45049-9	300	K	YES HONEYNELL NO	
PAILURE MODE-FAIL DURING DEGUATE PECO THRU TERMINA	. BURING OPERATION. UNIT FAILED TO GIVE PROPER OUTPUT UNEN TORGUING THE PITCH GYRO DUE TO LACK OF TERMINAL AND ARCING POOR TERMINAL TO ELECTRICAL GROUND.	TOPER OUTPUT WHEN TOR	AUTH THE	11CH 6VR	DUE TO LACK OF A	
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GENERAL DYNAMICS CONVAIR BIVISION

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	10 104 1066	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBO	1 KE				
	BUB-STER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	\$17E	E E	VEHICLE SITE PRI VENDOR MANE	
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	CORRECTIVE ACTION-VENDON EN PER 1942.	CORRECTIVE ACTION-VENDOR INITIATED REDELIGN BY INCORPORATING A LARGER FELD-THRU TERMINAL OF ALL UNITS DELIVENCE R FED 1948.	ING A LARGER FEED-TH	TERMINAL	5 VIII 5		מברו הראות ע	
	AUTOFILOT-SQUARE-A/B 67RO PACKAGE	A-90-04-303E 6YRO-RATE-948D	FAR 27-45045-5	64E 611E14	# E5	40 H	YES HOMETHELL NO	01274
	FAILURE MODE-BHORY CELEG STOR LEAD.	KELECT)-NO GUTPUT FROM YAW BHRD CAUSED BY BHORT CIRCUIT OF THE CUTPUT TERMINAL BY MISPLACED RESI	BY SHORT CIRCUIT OF	THE CUTPU	TCRNIMAL	¥	ISPLACED REST	
	CORRECTIVE ACTION-INSPEC	INSPECTION PERSONNEL INSTRUCTED TO ENSURE THE CLEARANCE OF		CALIBRATOR REHISTORS.	RENISTORS	•		
	AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-98-04-3070-F Gyro-D13-PLACEMENT-MERING	FAR 27-41002-855	5F 611212	ETR	7. O	YES KEARFOTT NO	12376
	FAILURE MODE-OPEM (ELEC' EGATIVE DIRECTION, BPIN (ICLECT). DURING CHECKOUT SHED NO-GO OCCURRED WHEN THE PITCH GYRO WAS TORQUED TO THE STOP IN THE M SPIN MOTOR PHASE A PLEMLEAD BROKE AND OPEN CIRCUITED SPIN MOTOR POMER.	ARED WHEN THE PLICH PEN CIRCUITED BAIN W	GYRO MAS STOR PONER	CORQUED TO	Ä	STOP IN THE H	
	CORRECTIVE ACTION-UFRINO	URNOWN. INVESTIGATION OF CAUSE OF BROKEN PLEMEAD TO BE CONTINUED BY VENDOR AND 40/C.	CH PLEXEAB TO BE CO	YTIMUED BY	VENDOR AN	3	ċ	1
	AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-98-04-3069-F 67RO-DI 2PLACEMENT	FAR 27-41002-855	365	RTR	YCS A	YES KEARFOTT NO	******
	FAILURE HODE-CONTAMINATION. 8 OF FLAKED PLATING MATERIAL	FAILURE HODE-CONTANIHATICH. BISCTICM SINTERHITTENT MECHANICAL BINDING) INDICATED, GYRO CONTAINED TWO BMALL PARTICLE 1 OF FLAKED PLATING MATERIAL.	ICAL BINDING) INDICA	TED. GYRO	CONTAINED	5 6	MALL PARTICLE	
	CORRECTIVE ACTION-LINKHOLMS.	MM. INVESTIGATION OF CAUSE OF STICTION TO BE CONTINUED BY VENDOR AND GD/C.	TION TO BE CONTINUED	BY VENDOR	AND 60/C.			
_	AUTOFILOT-SQUARE-A/B STRO PACKAGE	A-88-04-3047 Andl 1716A	FAR #7-43#08-001	911515	SYCAHORE	2 2		:
	FAILURE MODE-ERRATIC OF	FAILURE MODE-ERRATIC OPERATION-HIGH PREBUENCY OBCILLATION SUPERIMPOSED ON THE NORMAL ADD CPS OUTPUT OF YAM STRO GUE To capacitive loading by the lambline circuits.	SUPERIMPOSED ON THE	NORMAL 404	CP8 QUT	8	YAW BYRO BUE	
	CORRECTIVE ACTION-UMEND	CORRECTIVE ACTION-LAWINDAM: HOMEVER: OSCILLATIONS ARE FILTERED IN THE SERVOANPLIFIER:	INED IN THE BERVOAMP	LIFICA.			-	
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		and the second s						

GENERAL UTHANICS CONVAIR DIVISION

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	DIFFICULTIES REVIEW-AUTOFILOT STREEM-AIRBORNE	JOSELOF BYBIEM-AIRSO	2				ſ
SYSTEM SUE-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	11 ME 01F	2 5 5	PRI VENDOR NAME OTH VENDOR PART NO	8
AUTOPILOT - SQUARE-A/B GYRO PACKAGE	AA61-GE14/P1-602-00-05 PITCH 67RO	COUNTDOM	5F 611211	=	ž Š		***************************************
FALLURE MODE-ENRATIC OF	FAILURE HODE-ERRATIC OPERATION-BHRD LIGHT DROPPED OUT DURING THE GAP TEST.	IING THE GAP TEST.					·
SYSTEM EFFECT-INFROPER OULD DROP OUT.	SYSTEM EFFECT-INFROMEN DISCRETE SIGNAL-MEN THE PITCH SYRO WAS TORSUED MAND OVER IN MEGATIVE PITCH THE SHAD LIGHT M ULD DROP OUT.	NO MAIS TORBUED HARD OF	TER IN MES	TINE PIT	ž Ž	if susto LICAT	3
VEHICLE EFFECT-NOME.							
CORRECTIVE ACTION-6780	CORRECTIVE ACTION-SYRO 235 MAS REPLACED BY 6YRO 205.						_
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A98-04-3022-F AMPLIFIER	FAR 27-41002-855	5F 611209	2 5	₽ ₽	3/09	23.47.6.5
FAILURE MODE-FAIL TO OF	TO OPERATE AT PRESCRIBED TIME. THE SYMPTOM OF FAILURE WAS AN INOPERATIVE PITCH TORGUER IMPUT. REP MOT CONFIRMED. REPORTED FAILURE WAS DUE TO HUMAN ERROR ORTEST EQUIPMENT MALFUNCTION.	PTON OF FAILURE WAS AVION TO HUMAN ERROR ORTES	I EQUIPMENT	IVE PITCH	108.	IUER THATUT. R	<u>.</u>
CORRECTIVE ACTION-ETR WAS NOTIFIED OF FAILUR ROBLEN AND TAKE ACTION WHEN DEENED NECESSARY.	CORRECTIVE ACTION-ETM WAS NOTIFIED OF FAILURE ANALYBIS RESULTS. MELIABILITY CONTROL ENGINEERING WILL MONITOR THIS P OBLEW AND TAKE ACTION WHEN DEEMED NECESSARY.	ESILTS. RELIABILITY C	CHTROL ENG	NEERING	אורר	HONITOR THIS	.
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	AR141-0-1-121/FC-400-02-121	COMPOSET TE-PACTORY	121D	FACTORY	₽ 9		55 2040
FAILURE MOE-FAIL DURING OPERATION. CHAN TE FULL NEGATIVE TORQUING FROM GUIDANCE A ENOUGH TIME TO MONE IN FULL NEGATIVE YAM.	7 IS	of the Plight Control bandorn recorder, sustainer yaw, did hot indica seconds. The 6.E. Test Tapes were not giving the Plight Control Gyro	ECCROER, SI	157A INER 1106 111E P	1	DID NOT 1101	
SYSTEM EFFECT-OFERATIO	SYSTEM EFFECT-OPERATION STOP PREMATURELY. THE PLANMED TEST OF THE YAM 6YRO WAS NOT FULLY PERFORMED.	ST OF THE YAM GYRO WA	NOT FULL	PERFORM	ė		
WEHICLE EFFECT-COMPOSI	WEMICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTING RESULRED.	REGUIRED.					
CORRECTIVE ACTION-THE	GUIDANCE TEST TAPES WERE REPURCHED.						
AUTOPILOT-SQUARE-A/B	A-98-04-3029F Rate 6780 Reseator	FAR 87-45045-8	611206	ETR	÷ 3		
FAILURE MODE-ELECTRICAL OPEN, DURING MAPCHE APPLIED, COLD BOLDER JOINT ON ONE END OF THE FOLLOWERS INDICATING NO TORRUER ACTION.	FAILURE MODE-ELECTRICAL CPEN. DURING MAPCHE CHECKOUT, THE PITCH RATE 6TRO DID NOT PROPERLY TORQUE WHEN VOLTAGE WAS PPLIED. COLD SOLDER JOINT ON OWE END OF THE CALIBRATION RESISTOR RESULTED IN NO SIGNAL OUTPUT TO THE OUTPUT ENITTEI FOLLOMERS INDICATING NO TORQUEA ACTION,	CHECKOUT, THE PITCH RATE 6YRO DID NOT PROPERLY TORGUE WHEN VOLTAGE WAS CALIBRATION RESISTOR RESULTED IN NO SIGNAL OUTPUT TO THE OUTPUT ENITTER	NOT PROPE	RLY TORAU SUTPUT TO	¥ ¥	EN VOLTAGE NA OUTPUT ENETT	. 5
CORRECTIVE ACTION-THE	CORRECTIVE ACTION-THE CIRCUIT BOARD WAS REDESIGNED PLACING THE CALIBRATION RESISTOR IN AN AREA OF EAST ACCESS TO FA	46 THE CALIBRATION RE	NI NOTELIA	IN AREA O	3	17 ACCESS TO	.
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SENERAL DYNAMICS CONVAIR DIVISION

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15 JUN 1966	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥		
37.87EH 8.45-87.87EH	TEST/REPORT NUMBER PAILED COMPONENT MANE	DIF DATA SCURCE PART NUMBER	VEHICLE SITE DATE DIF	VEHICLE SITE PAI VENDOR HANT DATE DIF TIME DIF OTH VENDOR PART NO	
CILITATE PROPER SOLDERING.	Arbenna, desperadoramento apparamento de productivo de participa de la companya de la companya de la companya d				*****
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-88-04-3083-F AMPL?F1ER	FAR 27-41548-5	SILKDS FACTORY	4E8	****
FAILURE MODE-ERRATIC OPER AUSE THERMAL RUMMMY OF BY	FAILURE MODE-ERRATIC OPERATION-UNIT OSCILLATED UNDER LOADED CONDITIONS DURING TEST-TORBUER FAILURE NOT VERIFIED BEC AUSE THERMAL RUMAMY OF ENDSS TRANSISTORS PREVENTED COMPLETE TESTING OF AMPLIFIER.	CONDITIONS DURING TESTING OF AMPLIFTI	TEST-TORBUCE FAILU	RE NOT VERIFIED BEC	
CORRECTIVE ACTION-LARINOAR ING FAILURE AMALYBIB.	CORECTIVE ACTION-UNKNOWN. REPORTED FAILURE NOT CONTINED BECAUSE THERMAL RUMANAY OF TRANSISTORS DESTROYED UNIT DUR ME FAILURE ANALYSIS.	ECAUDE THERMAL RUMA	AY OF TRANSISTORS	DESTROYED UNIT DUR	
AUTOFILOT-SQUARE-A/B	A-98-04-3069F 6YRO-018PLACENENT	F.R 27-41002-855	35E ETR 4111E0	YES KEARFOTT HO	094223
FAILURE MODE-ERRATIC OPER M.	FAILURE MODE-ERRATIC OPERATION, STICTION (INTERHITTENT MECHANICAL SINDING) CCCURRED AND MAS CONTINED. CAUSE UNRINOW 1. CORRECTIVE ACTIONS MEMORA EACH AND WENDER FIRSTERIES INVESTIGATION CAUSE OF STICTION.	MICAL BINDING) OCC.	JAPED AND WAS COMP	IRNED. CAUSE UNKNOW	·
AUTOFILOT-SQUARE-A/B	A-86-04-3040-F AMPLIFIER-TRANSISTOR	FAR ET-4100E-055	SF ETA	YES	7
FAILURE MODE-FAIL DURING 9 AND 0-6.	FAILURE HODE-FAIL DURING OPERATION. PITOH DISPLACEMENT GYRO WOULD NOT MULL DUE TO THERMAL RUMANAY OF TRANSISTORS &-	WOULD NOT MULL BUE	TO THERMAL RUMAIN	Y OF TRANSISTORS &-	
CORRECTIVE ACTION-TORBUED	CORRECTIVE ACTION-TORBUER AND BIGMAL AMPLIFIERS REDEBIGMED PER ECP 853. RM388 TRANSISTORS REPLACED WITH EMASS AND H ATS SIMES INFROVED.	PER ECP 855. RN558	TRANSIBTORS REPLAC	ED WITH ENGINE AND H	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	AESI-0887/L1-401-00-108 Gyro Bighal Amilifier	r.i.ear	1060 1-1 615122 244	¥ € 3	
FAILURE MODS-PAIL DURING E OCCURRED AS A RESULT OF IVE EXTERNAL MEATING OF 61	FAILURE MOCE-FAIL DURING OPERATION. PITCH CONTROL LOST AT 244 SECONDS. POSSIBLE THAT A 67RO SIGNAL AMPLIPIER FAILUR E OCCURRED AS A RESULT OF USE OF NEW INSULATED TYPE TRANSISTOR (LOW RUNAWY TEMP CHARACTERISTIC) COUPLED WITH EXCESS IVE EXTERNAL MEATING OF 67RO PACKAGE. MEATING MAT HAVE SEEM CAUSED BY LOSS OF RETROROCRET COVER.	44 SECONDS. POSSIBL OR (LOW RUNAWAY TEN CAUSED BY LOSS OF R	E THAT A 67RO SIGN P CHARACTERISTIC) ETROROCKET COVER.	AL AMPLIFIER FAILUR COUPLED WITH EXCESS	
BYBIEN EFFECT-ERRATIC OFFINA, LOSS OF PITCH CONTROL. RESULT OF LOS DEFLETION.	BYBIEM EFFECT-ERRATIC OPERATION, THE MIBBILE REACHED A PITCH-UP RATE OF 4.87 DEGREES PER BECOND BY BUBLINER BHUTDO MM. LOSS OF PITCH CONTROL RESULTED IN NOM-RECEIPT OF GROUND GUIDANCE GENERATED BECO. BUBLINER ENGINE RAUT DOWN AS A REBULT OF LOK DEFLETION.	H-UP RATE OF 4.87 D GUIDANCE GENERATED	EGREES PER SECOND SECO. BUSTAINER EN	BY SUSTAINER SHUTDO WINE RAUT DOWN AS A	

VEHICLE EFFECT-INFROPER TRAJECTORY. MISSION FAILURE RESULTED FROM PLISHT CONTROL SYSTEM MALFUNCTION.

SENERAL DYNAMICS CONVAIR DIVISION

18 JUN 1966

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

THE PROPERTY ACTION-TOWNERS IN THE AREA OF A WARP MADINE. A MARGE OF IMPROPERTY CANDITIONAL MARKES PROTECTION FAND TO THE AREA OF A WARP MADINE. A MARGE OF IMPROPERTY CANDING METALS AND THE AREA OF A WARP MADINE. A MARGE OF IMPROPERTY CANDING METALS AND THE AREA OF A WARP MADINE. A MARGE OF IMPROPERTY CANDING METALS AND THE AREA OF A MARGE OF IMPROPERTY CANDING METALS. A MARGE OF IMPROPERTY TO TOWNER AND THE MARGE OF THANKING METALS AND THE MARGE OF THANKING METALS. A MARGE OF THANKING METALS AND THE MARGE OF THANKING METALS AND THE MARGE OF THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING METALS AND THANKING METALS AND THANKING METALS AND THANKING METALS. A MARGE OF THANKING METALS AND THANKING M
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CORRECTIVE ACTION-WORNOW. CORRECTIVE ACTION-WORNOW. ATRIANGE TO TO THE WORN PART OF THE WORN PART WORNER. ATRIANGE WORLD.	8981 WAT 81	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBOR	¥			_
MERIODRETTA-RCO-DI-OR? ARRI-DRB3/FC-RCO-DI-OR? FOLENAKE, SENO BIABINE ED PERCENT HIGH. A TOLENAKE OF 10 PERCENT 18 O.M. THIB WAS CAUSED BY A LOW GAIN PITCH PRICHARD FOR POTHUTOMETER CALIBRATION. FOREIT DELLAYAM TORGUING PORTRETIONETER. THE HIGH SETTING OF THE POT, WAS CAUSED BY A LOW GAIN PITCH AND AND STRUCTURE AND STRUCTURES. THE HIGH SETTING OF THE POT, WAS CAUSED BY A LOW GAIN PITCH COMPONENT AND STRUCTURES. THE STRUCTURE OF THE POT, WAS CAUSED BY A LOW GAIN PITCH COMPONENT AND STRUCTURES. A A-SF-CA-SOAD A A-SF-	STSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE BI		VENDOR NAME	
A FEEL-DESSYTC-SCOOL-DET POTENTIONETER-PITCH/YAM TORGUINE FOR THE POTENTIONETER PRICH THEN A TOLERANCE OF 10 PERCENT 18 O.K. THIS WAS CAUSED BY THE POTENTIONETER AND STATION OF THE POT, WAS CAUSED BY A LOW GAIN PITCH MATCH AND STALLS. BY POTENTIONETER ALIBARITON. FOR THE PITCH/YAM TORGUINE POTENTIONETER. THE HEAD SETTING OF THE POT, WAS CAUSED BY A LOW GAIN PITCH MATCH STRUCK AND STALLS. BY POTENTIONETER AND PROPER OFFENTION. FOR A A-SF-CAL-SOLOS A A-SF-C	CORRECTIVE ACTION-UNKING	, mark					***************************************
TOLERANCE, SERVO BIABING SO PERCENT HIGH. A TOLERANCE OF TO PERCENT IS O.K. THIS WAS CAUSED BY A LOW GAIN PITCH HIGH IS INITIALLY IN THE CIRCUIT FOR POTENTIONEER CALIBRATION. DESTINATION OR STANDARD TEST REQUIRED TO SHOW PROPER OPERATION. COMPONENTS MERCE AND STANDARD. A-SP-CAL-SOAR ANSWERS RE-ADJUSTED. A-SP-CAL-SOAR ANSWERS RE-ADJUSTED. A-SP-CAL-SOAR ANSWERS RE-ADJUSTED. FAR STANDARD TO BETERHINED AND CASCURED BY DESTRUCTION OF COMPONENTS AT THE WASTERN AND SHORTED G-7 A MARKIFLER RANGISTOR. MEGI-OTYSALLE-ADZ-OO-105 RCL. AMPLIFIER TRANSISTOR RCL. AMPLIFIER TRANSISTOR RCL. AMPLIFIER TRANSISTOR RCL. AMPLIFIER THE MASSISTOR. TRANSISTOR. TRANSISTOR OF THE WAS BUPLYING THE COUPUT TRANSFORMER AND STOCKHICLE STANLL. THERMAL RUMMAY OF THIS TRANSISTOR WOULD SATURATE THE OUTPUT TRANSFORMER AND OF THE ROLL SIGNAL. THERMAL TO THE VEHICLE. SEC VEHICLE STANLLITY. THE VEHICLE. SEC VEHICLE STANLLITY. THE VEHICLE. SEC VEHICLE STANLLITY. THE VEHICLE. SEC VEHICLE STANLLITY. THE VEHICLE BECAME UNSTABLE IN ROLL BEGINNING AT 188 SECONDS. PITCH AND OF THE ROLL SIGNAL. THERM WAS THE VEHICLE TO TOTAL HISBION. HER DESIGN PRETERO. THE WAS IN THE ENTRY BY AND THE PARA HER DESIGN PRETERO. THE WAS IN THE CHITCHE THE OUTPUT THANSFORMER AND OF THE ROLL SIGNAL. THE WAS THE VEHICLE THE OUTPUT THANSFORMER AND OF THE ROLL SIGNAL. THE WAS IN THE CHITCH THANSFORMER AND OF THE ROLL SIGNAL. THE WAS IN THE CHITCHE THE WAS IN THE CANNON THE STANSSISTORS. IN THE CANNON THE STANSSISTORS. THE SERVING MASSIVER THAN SISTORS. THE PRESSORS IN THE CANNON THE STANSSISTORS. THE STANSSISTORS IN THE CANNON THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE PRESSORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE STANSSISTORS. THE PRESSORS. THE PRESSORS. THE PRESSORS. THE PRESSORS. THE PRESSORS. THE PRESSORS. THE	LUTOPILOT-SQUARE-A/B	AEB1-0993/FC-6CO-01-027 POTENTIONETER-PITCH/YAW TORBUING	COMPOSITE-FACTORY	27F 611026	YES		98088
CONCOMENTA SERVICE SERVICE SERVICE TEST REQUIRED TO SHOW PROFER OPERATION. CONCOMENTA SERE RE-ADJUSTED. A-SF-D4-3046 A-SF-D4-3046 AND DESIRE RE-ADJUSTED. FAR A-SF-D4-3046 FAR A	FAILURE MODE-OUT OF TOL A HIGH SETTING OF THE PI BUCKOUT ANNLIFIER WHICH		GH. A TOLERANCE OF 1 HIGH SETTING OF THE ENTIONETER CALIBRATI	D PERCENT 18 O	.K. THI	LOW GAIN PITCH	
COMPONENTS WERE RE-ADJUSTED. A-SF-CA-DAG AND DURING OFFERATION. NO-GO ON CARD ED OF MAPCHE DECK E39. BURNED T-E TRANSFORMER AND SHORTED 9-7 A RANSISTORS. DURING OFFERATION. NO-GO ON CARD ED OF MAPCHE DECK E39. BURNED T-E TRANSFORMER AND SHORTED 9-7 A RANSISTORS. A 651-0794/LE-ADE-DO-105 ROLL AND DURING OFFERATION. EXCESSIVE HEATING CAUSED BY DESTRUCTION OF COMPONENTS AT TI ORGANISTORS. A 661-0794/LE-ADE-DO-105 ROLL SIGMAL AMPLIFIER TRANSISTOR ET-4100E-041 BIOLE SIGMAL AMPLIFIER TRANSISTOR FLIGHT OPER ANALOG SIGMAL, THERMAL RUMAWAY OF THIS TRANSISTOR WOULD SATURATE THE OUTPUT TRANSFORMER AND OF THE ROLL SIGMAL TO THE VEHICLE. SO OF THE ROLL SIGMAL TO THE VEHICLE. AS OF THE ROLL SIGMAL THERMAL RUMAWAY OF THIS TRANSISTOR WOULD SATURATE THE OUTPUT TRANSFORMER AND OF THE ROLL SIGMAL TO THE VEHICLE BECAME UNSTABLE IN ROLL BEGINNING AT 188 SECONDS. PITCH AND Y WAINTAINED. THERE WAS NO FFET ON TOTAL MISSION. SO OF THE ROLS SIGMAL THE PRINCIPLES OF THE STERRUMRY SORE. THE ENSIST RANSISTORS IN THE FILTER-SERVONDS PACK AND THE MASS TRANSISTORS. THE OCAMPLIFIER OUTPUT SHASS TRANSISTORS IN THE FILTER-SERVONDS PACK AND THE MASS TRANSISTORS. THE OCAMPLIFIER OUTPUT SHASS TRANSISTORS IN THE FILTER-SERVONDS PACK AND THE MASS TRANSISTORS. THE OCAMPLIFIER OUTPUT SHASS TRANSISTORS IN THE FILTER-SERVONDS. STANS THE WAS STANSISTORS. THE OCAMPLIFIER OUTPUT SHASS TRANSISTORS IN THE FILTER-SERVONDS. STANS THE WASSER TRANSISTORS. THE OCHOR TAKEN AFTER LOSS OF PITCH STABILITY ON VEHICLE 1000.	STSTEM EFFECT-INFROPER	AMALOG SIGNALS. SERVO BIASING MAS 1	80 HIE.				
ALESTORA AND CONTRIBET BY AND CONTRIBET CONTRIBET AND SHORTED GOVERNMENT OF THE STANSFORMER AND SHORTED GOVERNMENT AND THE STANSFORMER AND SHORTED GOVERNMENT AND THE STANSFORMER AND SHORTED GOVERNMENT AND THE STANSFORMER AND SHORTED GOVERNMENT AND THE STANSFORMER AND SHORTED GOVERNMENT AND THE STANSFORMER AND CONTRIBET TRANSFORMER AND CONTRIBET TRANSFORMER AND THE STANSFORMER AND CONTRIBET THE MASS WORE SUCCESSION THAN THE TRANSFORMER AND CONTRIBET THE CONTRIB	CORRECTIVE ACTION-COMP	TE DELAYED. POST COMPOSITE TEST REGI. OMENTS WERE RE-ADJUSTED.	JIRED TO BHOM PROPER	OPERATIOM.			
DURING OPERATION. NO-60 ON CARD ED OF MARCHE DECK E39. BURNED T-E TRANSFORMER AND SHORTED 9-7 A BAMSISTORS. AE61-0794/LE-402-00-105 ROLL AMPLIFIER TRANSISTOR ROLL AMPLIFIER TRANSISTOR E7-41002-841 SIJOE1 188 FLIGHT AE61-0794/LE-402-00-105 FLIGHT AG61-0794/LE-402-00-105 AG61-0794/LE	AUTOFILOT-SQUARE-AAB GTRO PACKAGE	A-9F-04-3046 AMPLIFIER	FAR 27-45202-1	130		•	864139
AE61-0794/LE-402-00-105 PURING OPERATION. EXCESSIVE HEATING CAUSED BY LOSS OF RETRO-ROCKET COVERS COULD RESULT IN THERMAL ROLL SIGNAL AMPLIFIER TRANSISTOR LEXAS INSTRUMENTS MAS SUPPLYING TWO PERHIONS OF THIS TRISOCATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAMAY. IT COULD MOT SE DETERMINED MITCH ISOCATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAMAY. IT COULD MOT SE DETERMINED MITCH OF THE ROLL SIGNAL. THERMAL RUMAMAY OF THIS TRANSISTOR WOULD SATURATE THE OUTPUT TRANSFORMER AND OF THE ROLL SIGNAL TO THE VEHICLE. SOF VEHICLE STABILITY. THE VEHICLE BECAME UNSTABLE IN ROLL BEGINNING AT 186 SECONDS. PITCH AND Y MINTAINED. THERE WAS NO EFFECT ON TOTAL MISSION. MEW DESIGN RETRO-ROCKET COMERS WERE USED AFTER 5 FEBRUARY 1962. THE 2N33S TRANSISTORS IN THE 64RO CED MITH 2M45E TRANSISTORS. THE DATH THE FILTER-SERVOAMP PACK IT METALSISTORS. THIS ACTION TAKEN AFTER LOSS OF PITCH STABILITY ON VEHICLE 1980.	FAILURE MODE-FAILED DU NO G-G TYPE EN539 TRANS CORRECTIVE ACTION-UMEN	RING OPERATION. NO-60 ON CARD ED OF ISTORS.	HAPCHE DECK 239. BU	NED T-E TRANSF RED BY DESTRUCT	ORNER A	A	
AE61-0794/LE-402-00-105 FLIGHT 1050 1-2 YES TEXAS INSTRUME. POLL SIGNAL AMPLIFIER TRANSISTOR ET-41002-641 FOLL SIGNAL AMPLIFIER OUTPUT TRANSISTOR 150CATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAWAY. IT COULD MOT SE DETERMINED MAICH 150CATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAWAY. IT COULD MOT SE DETERMINED MAICH 150CATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAWAY. IT COULD MOT SE DETERMINED MAICH 150CATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAWAY. IT COULD MOT SE DETERMINED MAICH 150CATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAWAY. IT COULD MOT SE DETERMINED MAICH 150CATED EMITTER TYPE WAS MORE SUSCEPTIBLE OF THERMAL RUMAWAY. IT COULD MOT SECONDS. FITCH AND Y MINTAINED. THERE WAS NO EFFECT ON TOTAL MISSION. MEW DESIGN RETRO-ROCKET COVERS WERE USED AFTER 5 FEBRUARY 1962. THE ENSSS TRANSISTORS IN THE 67RO CED MITH EMSS TRANSISTORS. THE DC AMPLIFIER OUTPUT ENSAS TRANSISTORS IN THE FILTER-SERVOAMP PACK 15TH 27-45E27-3 TRANSISTORS. THIS ACTION TAKEN AFTER LOSS OF PITCH BYBBILITY ON VEHICLE 198D.	NE OF FAILURE.						\neg
TION. EXCESSIVE HEATING CAUSED BY LOSS OF RETRO-ROCKET COVERS COULD RESULT IN THE AMPLIFIER CUTPUT TRANSISTOR. TEXAS INSTRUMENTS WAS SUPPLYING TWO FERNIONS OF THIS SIGNAL. THERMAL RUNAWAY. IT COULD MOT SE DETERMINED WAS SIGNAL. THERMAL RUNAWAY OF THIS TRANSISTOR WOULD SATURATE THE OUTPUT TRANSFORMER SIGNAL TO THE VEHICLE. SIGNAL TO THE VEHICLE BECAME UNSTABLE IN ROLL BEGINNING AT 188 SECONDS. PITCH A WERE WAS NO EFFECT ON TOTAL MISSION. ETRO-ROCKET COVERS WERE USED AFTER 5 FEBRUARY 1882. THE ENSIST TRANSISTORS IN THE SILVER-SERVOAMP. SE TRANSISTORS. THE DC AMPLIFIER OUTPUT ENSAS TRANSISTORS IN THE FILTER-SERVOAMP.	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	AE61-0794/LE-402-00-105 ROLL AMPLIFIER TRANSISTOR	FLIGHT ET-41002-641	ដ	¥ ¥	TEXAS NTS	
SIGNAL, THERMAL RUNAWAY OF THIS TRANSISTOR WOULD SATURATE THE OUTPUT TRANSFORMER SIGNAL TO THE VEHICLE. E STABILITY. THE VEHICLE BECAME UNSTABLE IN ROLL BEGINNING AT 186 SECONDS. PITCH A FINERE WAS NO EFFECT ON TOTAL MISSION. RETRO-ROCKET COVERS WERE USED AFTER 5 FEBRUARY 1962. THE 2NSSS TRANSISTORS IN THE 1985 TRANSISTORS IN THE 71LTER-SERVAMP 1985 TRANSISTORS. THE DC AMPLIFIER OUTPUT 2NSAS TRANSISTORS IN THE FILTER-SERVAMP 7-8 TRANSISTORS. THIS ACTION TAKEN AFTER LOSS OF PITCH STABILLITY ON VEHICLE 1985.	FAILURE MODE-FAIL DURI RUMMAY OF A 2NG39 ROL ANSIBTOR. THE NEWER 18C	ING OPERATION. EXCESSIVE HEATING CAU L SIGNAL AMPLIFIER OUTPUT TRANSISTO X.ATED EMITTER TYPE MAS MORE SUSCEPT	SED BY LOSS OF RETRC R. TEXAS INSTRUMENTS IBLE OF THERMAL RUMA	-ROCKET COVERS MAS SUPPLYING MAY, IT COULD	COULD F TWO FER	ESULT IN THERMAL HIONS OF THIS TR ETERMINED WHICH	
HERE WAS NO EFFECT ON TOTAL MISSION. ETRO-ROCKET COVERS WERE USED AFTER 5 FEBRUARY 1962, THE ENSIS TRANSISTORS IN THE SETANDSTORS. THE DC AMPLIFIER OUTPUT ENSIST TRANSISTORS IN THE FILTER-SERVOAMP SETANDSTORS. THE DC AMPLIFIER OUTPUT ENSIST TRANSISTORS IN THE FILTER-SERVOAMP. TRANSISTORS. THIS ACTION TAKEN AFTER LOSS OF PITCH STABILLITY ON VEHICLE 1980.	SYSTEM EFFECT-IMPROPER	SIGNAL.	THIS TRANSISTOR WOUL	D SATURATE THE	OUTFUT		
ETRO-ROCKET COVERS WERE USED AFTER 5 FEBRUARY 1962. THE 2NSSS TRANSISTORS IN THE SERVOAMP SO TRANSISTORS. IN THE FILTER-SERVOAMP STRANSISTORS. THIS ACTION TAKEN AFTER LOSS OF PITCH STABILITY ON VEHICLE 1980.	WEHICLE EFFECT-LOSS OF AM STABILITY WERE MAINT	씨 F	AHE UNSTABLE IN ROLL HIBBION.	BEGINNING AT	186 BEC	PITCH AND	
	COCRECTIVE ACTION-NEW PACKAGE WERE REPLACED AGE WERE BEPLACED WITH	DESIGN RETRO-ROCKET COVERS WERE USE MITH EMSS TRANSISTORS. THE DC AMPL 87-45227-S TRANSISTORS. THIS ACTION	D AFTER S FEBRUARY SIFTER OUTPUT ENDAS 1	BGE. THE ENSIGNATIONS IN PITCH STABIL!	THE FILL	- 1	0 x
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	DIFFICALIES REVIEW ACCOUNTS STORY AND AND AND AND AND AND AND AND AND AND	GETTER STEEL AIRBOR	2				_
8787EM 818-875M	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE FART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	PRIOTH	VENDOR NAME	
AUTOPILOT-SQUARE-A/B GTBO PACRAGE	A-9F-04-3042F GTRO-DI 3FLACEMENT	FAR 27-45202-1	57E 611017	MARREN	F 5	KEARFOIT	894281
FAILURE HODE-OUT OF TOLERANCE, NO-GO WHILE TOLERANCE MAXIMUM IS 16 DEG/HR.	FAILURE MODE-OUT OF TOLERANCE, NO-60 ON MAPCHE CARD BY PROBABLY DUE TO EXCESSIVE YAW 67RO DRIFT-24 DE6/HR MEASURED Hile Tolerance maximum is 16 DE6/HR. COBSECTIVE ACTION—VENDOR REDESIGNED GYRO INCORPORATING IMPROVED DRIFT CHARACTERISTICS.	OBABLY DUE TO EXCESS!	IVE YAW GY	RO DRIFT-	3	G/HR MEASURED	
AUTOFILOT-SQUARE-A/B GTRO PACKAGE	AE61-1025/FC-6CO-02-036 POTENTIOMETER	COMPOSI TE-FACTORY 27-45201-819	36F 611013		₹ 5		898432
FAILURE MODE-OUT OF TOLERANCE-FLI JUSTED POTENTICHETER.	OLERANCE-FLIGHT CONTROL DATA INDICATED A GREATER THAN ALLOWABLE PITCH GYRO BIAS DUE TO A MISAD	ED A GREATER THAN ALI	LOMABLE PI	TCH GYRO	BIAS	DUE TO A MISAD	
SYSTEM EFFECT-OPERATION TOO HIGH.	E G	H 6YRO BIAS TOO HIGH. POST-COMPOSITE TESTING WAS REQUIRED TO DETERMINE SOURCE OF TROUBLE. COMPOSITE	DETERMINE	SOURCE OF	180	JBLE. COMPOSITE	
METEST REGUIRED. CORRECTIVE ACTION-THE POTENTIONET	TER WAS RESET	TO THE CORRECT VOLTAGE LEVEL.					
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	RA-98-04-296-E	FAR 27-41001-937	1170	ETR	S S		894524
FAILURE MODE-FAILED DURING OPERAI GINE SIGNALS REPORTEDLY FAILED TO ME CANISTER.	IION-DURING A BE RECEIVED.	SYSTEM FREQUENCY RESPONSE TEST, THE BOOSTER JETTISON AND SUSTAINER EN EXTENSIVE FAILURE ANALYSIS TESTING FAILED TO CONFIRM AHY FAILURE IN T	THE BOOST	ER JETTISON AND TO CONFIRM ANY	NON RM A	ND SUSTAINER EN HY FAILURE IN T	
CORRECTIVE ACTION-NO CORRECTIVE	CORRECTIVE ACTION AS NO FAILURE MAS CONFIRMED.	CONFIRMED.					
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-88-04-3001F SWITCH-THERMOSTAT	FAR 27-45045-5	1F 611009	OS OS	YES		896963
FAILURE MODE-FAIL DUR H OFFICERS CONSOLE, TH	FAILURE MODE-FAIL DURING OPERATION-DURING COMMIT SEQUENCE OF RUN 606-A6 AN AUTOPILOT FAILURE WAS INDICATED ON LAUNC M OFFICERS CONSOLE, THE LOGIC EQUIPMENT STOPPED COUNTDOMN SEQUENCE.	OF RUN 606-A6 AN AU SEQUENCE.	TOPILOT F.	NILURE WA	2	ICATED ON LAUNC	
CORRECTIVE ACTION-THE TEMPERATURE 8 PLUS OR MINUS 5 DEGREES.	E TEMPERATURE SAFE THERMO-SWITCH WAS CHANGED PER ECP 1887. THE NEW SWITCH OPERATES AT 20 DEGREE	CHANGED PER ECP 1697	. THE NEW	SWITCH O	PERA'	ES AT ED DEGREE	
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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

	DIFFICULTIES REVIEW-AUTOPILOT	PILOT SYSTEM-AIRBORNE	W Z				
87.57EH 848-3737EH	TEST/REPORT NUMBER FAILED COMPONENT MAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 710 3M17	PR1 OTH	VENDOR NAME	
AUTOPILOT - SQUARE-A/B GTRO PACRAGE	AC-61-0058/31-606-46-01 FORMARD GYRO PACKAGE MEATER	CAPTIVE	1F 611009	-110	Y ES		095347
FAILURE MOE-OUT OF TOLERANCE. ING BELOW ITS MINIMUM LIMIT OF	OLERANCE. AN AUTOPILOT FAIL INDICATION REBULTED FROM THE FORMARD GYRO PACKAGE TEMPERATURE FALL LIMIT OF 30 DEGREES F. CAUSE UNKNOWN.	RESULTED FROM THE	FORTHARD 61	IRO PACKA	5E 1E	MPERATURE FALL	
SYSTEM EFFECT-NOME.							
WAICLE EFFECT-COMPOSITE DELAYED.	IITE DELAYED.						
CORRECTIVE ACTION-PLA	CORRECTIVE ACTION-PLACE PACKAGE AFTER ATTEMPT 31-607-A6-01.						
AUTOPILOT-SAUARE-A/B GTRO PACKAGE	AC-61-0098/31-607-A8-01 FORLARD GYRO PACKAGE HEATER	CAPTIVE	1F 611009	\$1 -270	YES NO		695346
FAILURE MODE-OUT OF TOLERANCE. ING BELOM ITS MINIMUM LIMIT OF	OLERANCE. AN AUTOPILOT FAIL INDICATION RESULTED FROM LIMIT OF 30 DEGREES F. CAUSE UNKNOWN.	RESULTED FROM "VE	FORWARD 6	TRO PACKA	3	THE FORMARD GYRO PACKAGE TEMPERATURE FALL	
SYSTEM EFFECT-LOW TEMPERATURE	PERATURE ENVIRONENT.						
WEHICLE EFFECT-COUNTD	WEHICLE EFFECT-COUNTDOMN, COMPOSITE ABORTED AND RESCHEDULED.						
CORRECTIVE ACTION-REPLACED GYRO PACKAGE.	LACED GYRO PACKAGE.			·			
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	RA-98-5089-F GYRO-RATE SHRD	FAR 27-41703-809	11.70 610930	ETR	YES NO	HONEYHELL	694743
FAILURE MODE-OUT OF TOLERANCE. UE TO DEMACHETIZED SHRD MACHET.	IOLERANCE. YAW RATE GYRO GUTPUT WAS LESS THAM THE REQUIRED 0.5 VOLTS FEAK, FAILURE CONFIRMED.	IS THAN THE REQUIRE	0 0.5 VOLT	S PEAK. F	AILUR	E CONFIRMED. D	
CORRECTIVE ACTION-UNKNOWN.	, NACH.						
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	RA-98-3069-F GYRO-RATE-84RD	FAR 27-41703-809	1170 610930	ETR	22	HONEYHELL	894742
FAILURE MODE-OPEN (ELECT) -OPEN ERRONEOUBLY APPLIED WOLTAGE TO	ECT)-OPEN SHAD CIRCUIT IN PITCH RATE GYRO, FAILURE DUG TO USE OF WRONG 63E HARNESS CABLE WHICH OLTACE TO SHAD WINDINGS AND BURNED THE WIRES.	TYRO. FAILURE DUG TO	o use of w	RONG 6SE	HARNE	SS CABLE MAICH	
CORRECTIVE ACTION-ETR SITE TEST	SITE TEST HARNESSES REIDENTIFIED TO AVOID POSSIBILITY OF HUMAN ERROR IN CONNECTION.	VOID POSSIBILITY OF	F HUMAN ER	ROR IN CO	X NECT	10k.	
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

				4176	PER VENDOR NAME	, K	
5151EH 5UB-5131EH	TEST/REPORT NUMBER FAILED COMPONENT HAME	DIF DATA SOURCE	DATE DIF	31 IE 11ME DIF		3	
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	A-88-04-3041-F 67RO-013PLACEMENT	FAR 27-45202-1	1F 610930	BYCAMORE	SYCAMORE YES REARFOTT NO		• • • • • • • • • • • • • • • • • • •
FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED AT LOW SPEED PROBABLY DUE TO BAD BEARINGS.	PERATE AT PRESCRIBED TIME- YAW GYRO INOPERATIVE DUE TO FROZEN SPIN MOTOR. ROLL GYRO MOISY AMD Due to bad b≅arings.	S INOPERATIVE DUE TO	FROZEN SPII	N NOTOR.	IOLL GYRO NOIS	ğ Ç	
CORRECTIVE ACTION-VEND	CORRECTIVE ACTION-VENDOR PRODUCED NEW MODEL 67RO WITH IMPROVED SPIN MOTOR.	PROVED SPIN MOTOR.	SOE	ETA	YES		894212
FAILURE HODE-ERRATIC OPERATION-	RO PACKAGE AMPLIFIER ANPLIFIER FAILURE HODE-ERRATIC OPERATION-17K CPS OSCILLATION DEVELOPED IN PITCH SIGNAL AMPLIFIER-CAUSE OF UDE TO THERMAL EFFECTS ON PARTS.	27-45202-1 OPED IN PITCH SIGNAL	610927 AMPLIFIER-	CAUSE OF (NO OSCILLATION PROBABL	CBABL	
CORRECTIVE ACTION-NOME REQUIRED	E REQUIRED-OSCILLATIONS ARE FILTERED IN THE SERVOAMPLIFIER.) IN THE SERVONMPLIFT	÷				
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-9K-04-3043 GYRO-DISPLACEMENT-AMPLIFIER	FAR 27-45202-1	57E 610926	FAIRCHIL	FAIRCHIL YES KEARFOTT D NO		8 9 5 8 9
FAILURE HODE-FAIL DURING OPERATION-MAPCHE . YAW TOROUER AWTLIFIER FAILED WHEN TRANSI TO EXCEEDING OPERATIONAL LIFE OF 85G HRS.	FAILURE MODE-FAIL DUAING OPERATION-MAPCHE CHECKOUT EXHIBITED NO-GOS ON CARDS 67, 69, 81 AND 83-YAW GYRO INOPERATIVE . YAW TORQUER AWTLIFIER FAILED WHEN TRANSISTOR Q-\$ (TYPE 2NDS9) WENT INTO THERMAL RUNAWAY, GYRO FAILURE PROBABLY DUE TO EXCEEDING OPERATIONAL LIFE OF 85G MRS.	ITED NO-GOS ON CARDS ENSSS) WENT INTO THEI	67, 69, 61 HAL RUMA	AND 83-7	AW GYRO INOPEI AILURE PROBAB	RATIVE LY DUE	
CORRECTIVE ACTION-VENDOR PRODUK	ED NEW MODEL REPLACED WITH	GYRO WITH IMPROVED SPIN MOTOR. TORQUER AND SIGNAL AMPLIFIERS REDESIGNED 1 ENASG AND HEAT SINKS IMPROVED.	ORQUER AND	SICHAL AP	PLIFIERS REDE	SI CHED	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	A-9K-04-3068-F GYRO-DISPLACEMENT-MOTOR	FAR 27-45202-1	41E 610924	FAIRCHIL D	. YES		894086
FAILURE HODE-FAIL TO OPERATE AT ING GAINS. YAW GYRO SPIN HOTOR P	OPERATE AT PRESCRIBED TIME- DURING HAPCHE CHECKOUT HO-GOS OCCURRED ON CARDS CHECKING YAW TORAU IN MOTOR FAILES.	HAYCHE CHECKOUT NO-6	OS OCCURRE	D ON CARD!	S CHECKING YAN	7 TORGU	
CORRECTIVE ACTION-VENDOR REDESI	DOR REDESIGNED DISPLACEMENT SPIN MOTOR.)TOR.					
					4	PAGE 0453	T_1

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

87.8 TEN 31.6-57.8 TEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE DATE DIF	SITE TIME DIF	I M TO	VENDOR NAME	
AUTOPILOT-SQUARE-A/B 6780 PACKALE	A-9K-04-3068-F RATE 6TRO-ROLL	FAR 69-45045-1	416	FAIRCHIL YES	1		684089
FAILURE MOE-STRUCTURAL	FAILURE MODE-STRUCTURAL. ERRATIC OPERATION DUE TO LOSS OF DAMPING FLUID THRU BROKEN TERMINAL.	DAMPING FLUID THRU E	ROKEN TERN	II HAL.			
CORRECTIVE ACTION-VENDOR NOTIFI	OR NOTIFIED AND IMPROVED HIS BUALITY CONTROL	CONTROL OF TERHINAL INSTALLATION.	. INSTALLAT				
AUTOFILOT-SQUARE-A/B	A-9F-04-3044 Amplifier-transistor	FAR 27-45202-1	43E 610909	MARREN	% A.E.S		994141
FAILURE MODE-OUT OF TOLERANCE.	ERANCE. NO-608 ON CARDS 73 AND 162, MAPCHE DECK 237 DUE 70 THERMAL RUMAMAY OF TRANSISTOR 9-5	MAPCHE DECK 237 DUE	TO THERM	IL RUNANA	Ь	TRANSISTOR 6-5	······
CORRECTIVE ACTION-TORQUER AND	ER AND SICHAL AMPLIFIERS REDESIGNED	PER ECP 935.					
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	AC-61-0050/31604-A4-03 DISPLACEMENT GYRO ELECTRICAL COME	CAPTIVE	1F 610901	38	YES NO		496094
FAILURE MODE-OPEN (ELECTIVE MISTER.	FAILURE MOE-OPEN (ELECT). A POST-RUN CHECK REVEALED A BROKEN WIRE ON THE PLUG GOING INTO THE DISPLACEMENT GYRO CAN USTER.	KEN WIRE ON THE PLUC	GOING INT	O THE DI	Š	EMENT GYRO CAN	
SYSTEM EFFECT-OPERATION DOES NOT	I DOES NOT START-PITCH GUIDANCE ENABLE SWITCHING FAILED TO OCCUR.	LE SWITCHING FAILED	To occur.				
VEHICLE EFFECT-NONE.							-, <u></u>
CORRECTIVE ACTION-THE PLUG 148	LUG HAS REPLACED.	:					
AUTOPILOT-SQUARE-A/B GYRO PACKAGE	A-9H-04-5051 AMPLIFIER-RESISTOR	FAR 27-45202-1	43E 610901	FORBES	S S	And the state of t	894211
FAILURE MODE-ELECTRICAL RESISTOR (R-24) INTERMI	FAILURE MODE-ELECTRICAL OPEN, ROLL TORQUING GAIN OUT-OF-TOLERANCE & DEG/BEC/VOLT HIGHER THAN MAX ALLOMABLE-FEEDBACK Rebibtor (R-24) interhittently open.	-ERANCE & DEG/SEC/VC	LT HIGHER	THAN MAX	ALLO	MABLE-FEEDBACK	
CORRECTIVE ACTION-VENDOR REDESIG	R REDESIGNED RESISTOR BY INCLUDING WELDED LEAD JOINTS TO PREVENT DANAGE TO THE JOINT DURING	MELDED LEAD JOINTS 1	O PREVENT	DANAGE TO	<u>*</u>	COINT DURING	
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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AINBORNE

AUTOFILOT-BOUARE-A/B 67RO PACKAGE FAILURE HODE-ERRATIC OPE TYPE NO LOMGER USED.	PAILED COMPONENT NAME.	PART NUMBER	UA 16 U17		The second secon	
FAILURE MODE-ERRATIC OPF	ASS-04-3025F RATE GTRO HEATER	FAR 7-04250-1	610830	FACTORY	YES KEARFOTT NO	***
	FAILUME MODE-ERRATIC OPERATION. THE COARSE MEATER CYCLED ERRATICALLY, PROBABLE CONTAMINATED THERMOSTAT ELEMENT, OLD TYPE MO LOMGER USED.	ERRATICALLY. PROBABLE	CONTAHIN	NTED THER	MOSTAT ELEMENT. OLE	
CORRECTIVE ACTION-THE VENDO	CORRECTIVE ACTION-THE VENDOR IS PRESENTLY USING A THERMOBTAT WITH A COVERED ELEMENT PROTECTING IT AGAINST CORROSION OLD TIPE NO LONGER IN USE.	ITAT WITH A COVERED EL	EMENT PRO	1EC 11146 1	T AGAINST CORROSION	_
AUTOFILOT-SQUARE-A/B	A9H-04-3027F CIRCUIT BOARD TRANSISTOR	FAR E7-45202-1	44E 610626	FA78	YES NO	*****
FAILUME HODE-ELECTRICAL SHORT. D SIYELY HIGH PITCH KATE. SIGHAL AM SH. &S SUFFERED MECOMDARY DAMME.	FAILUME MODE-ELECTRICAL SHORT. DURING MAPCHE CHECKOUT, NO-GO WERE RECEIVED ON CARDS 66 AND 162 INDICATEING AN EXCES SIVELY HIGH PITCH KATE. SIGHAL AMPLIFIER TRANSISTOR 62 MAS SHORTED FROM EMITTER POST TO CASE DUE TO GOLD SOLDER SPLA SH. 83 SUFFERED SECONDARY DAMAGE.	HOORTED FROM EMITTER	CARDS 66 /	NO 16Z I	NDICATEING AN EXCES TO GOLD BOLDER SPLA	
CORRECTIVE ACT!ON-60/C P	CORRECTIVE ACTION-GOZC HAS PLRCED ALL TRANSISTORS MADE BY THIS MANUFACTURER. NEW TECHNIQUES ARE BEING USED TO ELIMI MATE THIS TYPE OF PROBLEM BY ABEQUATE RECEIVING INSPECTION.	THIS MANUFACTURER. P	EN TECHNI	SUES ARE	BEING USED TO ELIMI	
AUTOFILOT-SQUARE-A/B	A99-04-3026F RATE EYRO	FAR 7-04250-5	610023	FACTORY	YES KEARFOTT NO	097067
FAILURE MODE-DRIFT-DURID	FAILURE MODE-DRIFT-DURING FACTORY DRIFT TESTS, THIS RATE GYRO WAS REPORTED TO MAVE EXCESSIVE DRIFT.	67RO WAS REPORTED TO	HAVE EXCE!	ISIVE DRI	Ė	
CORRECTIVE ACTION-SINCE	THE CAUSE OF THE FAILURE WAS NOT ESTABLISHED, NO ACTION MAS TAKEN.	ESTABLISHED, NO ACTIC	IN MAS TAKI	÷		
AUTOFILOT-BOURE-A/B	98-04-3005F AMPLIFIER/TRANSISTOR	FAR 27-45302-1	610019	ETR	ž d	0
FAILURE MODE-CONTANINATI OF TRANSISTOR,	FAILURE MODE-CONTAMINATION-REMOTE RATE OUTPUT BIGNAL OUT OF TOLERANCEILOM). CAUSE OF FAILURE INTERNAL CONTAMINATION OF TRANSISTOR.	OF TOLERANCE (LOA) . CA	USE OF FA	ILURE INT	ERMAL CONTAMINATION	
CORRECTIVE ACTION-CORREC	CORRECTIVE ACTION-CORRECTIVE ACTION CONTAINED IN A CLASSIFIED REPORT ISSUED BY DEPARTMENT 143-3	FIED REPORT ISSUED BY	DEPARTMEN	17 145-3		
					PAGE 0455	

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***	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TLOT SYSTEM-AIRBOR	¥				
BYSTEM BUG-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF TI	317E 71ME DIF	O T H	VENDOR HANE	
AUTOFILOT-SHURE-A/B GTRO PACKAGE	#8-04-3003F Displacement Gyro, Yaw	FAR 27-49802-1	860 ETR	Œ	YES		*****
FAILURE MODE-FAIL DURING M MOTOR BEARING.	DURING OPERATION-YAW DISPLACEMENT GYRO MOT RUMMING. DEPLETION OF LUBRICANT AND OVERHEATING OF SPI	T RUMNING. DEFLETIO	OF LUBRICA	A D	OVERH	EATING OF SPI	
CORRECTIVE ACTION-6YRO RI	CORRECTIVE ACTION-67RO REPLACED. VENDOR NOTIFIED OF TYPE FAILURE, IMPROVED SPIN NOTOR DEING MANUFACTURED.	LURE, IMPROVED SPI	N HOTOR DELL	K HANUF	ACTUR	.03	
AUTOPILOT - SQUARE - A/B GYRO PACKAGE	98-04-3004F AMPLIFIER/TRANSISTOR	FAR R7-4550R-1	610813 ETR	«	¥ 63		10000
FAILURE HODE-CONTANIMATIS INTERNALLY CONTANIMATED	MINATICA-PITCH SIGNAL AMPLIFIER OUTPUT ETHIBITING PHASE REVERSAL INTERMITTENTLY, CAUSE OF FAILURE Nated transistor.	IBITING PHASE REVE	18AL INTERMI	TTENTLY	5	SE OF FAILURE	
CORRECTIVE ACTION-CORREC	CORRECTIVE ACTION-CORRECTIVE ACTION CONTAINED IN A CLASSIFIED REPORT ISSUED BY DEPARTMENT 145-3.	D REPORT 185UED BY	DEPARTMENT	145-3.			
AUTOPILOT-SQUARE-A/B	49H-04-3024F 67RO	FAR 27-45202-1	610811 FA	FAFB	<u>9</u> 9		80100
FAILURE MOE-OUT OF TOLE? ATING PROGRAMMER OUT PUT 9 AMMER WAS NOT ANALYSED. 61	FAILURE MOE-OUT OF TOLEGANCE, DURING DECK 237 MAPCHE CHECKOUT, NO-60 WERE PECEIVED FOR CARDS 129 THROUGH 138 INDIC ATING PROGRAMMER OUT PUT MALFUNCTION, MOMEVER, REPLACING THE GYRO CAN RESULTED IN PROPER SYSTEM OPERATION. THE PROGRAMMER NAS MOT ANALYSED, GYRO CANISTER MAS ANALYSED AND NO MALFUNCTION MAS FOUND.	NIT, NO-60 WERE PECT CAN RESULTED . FUNCTION WAS FOUND	SIVED FOR CA	808 129 STEN OF	THRO	UGH 138 INDIC ON. THE PROGR	
CORRECTIVE ACTION-HOME.	FAILURE WAS NOT IN GYRO CANISTER AND FORBES AFB IS NO LOV ER UNDER 60/C JURISDICTION.	FORBES AFB IS NO	ON ER UNDER	r 5/03	8 8	ICTION.	
AUTOPILOT-SQUARE-A/B GYRO PACKAUE	9D-04-266 Canibier	FAR 27-45202-1	E4E WTR 610811	Œ	7E.S B	YES BAKER-MAMLEY NO	692146
FAILURE MODE-LEAK, THE IT	THE ITCH CANISTER LEARED GHE. LEARAGE OF THE PRESSURIZATION GHE HAS DUE TO HOLES DRILLED AND TAP Machining Vendor.	THE PRESSURIZATION	ene has bue	10 HQ.	2 2	TLLED AND TAP	
CORRECTIVE ACTION-FOR UNI AL CMITH EMEINGERING APPRE TITION OF THE PROBLEH. 60/	CORRECTIVE ACTION-FOR UNITS ALREADY MACHINED, LEAKAGE CHECKOUT PERSONNEL ARE INSTALLING LARGER "RINGS WHICH WILL SE AL CHITH EMGIMERING APPROVALI. THE MACHINING VENDOR WAS INFORMED AND HE WILL USE EXTRA CAUTION TO AVOID FUTURE REPI TITION OF THE PROBLEM. 60/C WILL MAINTAIN BURVEILLANCE ON THIS PART TO ASSURE THAT THE SITUATION DOES NOT RECUR.	NY PERSONNEL ARE II RMED AND ME WILL U B PART TO ASSURE TI	INSTALLING LARGER -RINGS MAICH WILL USE EXTRA CAUTION TO AVOID FUTURE: THAT THE SITUATION DOES NOT RECUR.	RGER -R	INGS A VOI	-RINGS MHICH WILL SE TO AVOID FUTURE REPI I DOES NOT RECUR.	

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	SITE PRI VENDOR NAME	2/05	ISTOR RED AND MASS. HEAT SIN MELTING POINT		6 THE GYRO EMM OR LIGHT CAME	IELD WAS DEVIS	· · · · · · · · · · · · · · · · · · ·	BOVE MONINAL A IER CAIN SINCE THERE FACTORY EQUENTED TO THE REVIEWED T
	SITE PRI	B YES 60/C	ENGSS, RESC LACED BY 20 O END CAP.	YES NO NO	LUG CAL'STH	E WATER SH	33	PERCENT ALLIN AMPLIFICATION AMPLIFICATION OF SECURITY SEC
¥	VEHICLE S	44E FAFB 610730	AMPLIFIER. AMPLIFIER. ANSISTORS REP	111D 1E 610729 -5260	1 UMBILICAL P. D THE GYRO MU	NG. A RED TAP	610725 ETR	CAINS WERE 13 E. THE CHANGE BUTED TO DIFF
FILOT SYSTEM-AIRBOR	DIF DATA SOURCE PART NUMBER	FAR E7-45E0E-1	KE. CAUSE, FAILED T ED IN RATE TURQUER EDESIGNED, ENSS TR , VENDOR SILVER 60L	COUNTDOM	TOM DRIPPED ON F100 GRANNEL). R.D. NOT BE MULED AN	ED WITH DC-7 COMPOU	FAR 27-41002-845	TEST, THE CANISTER CONFIRM THE FAILURED AT ETH ARE ATTRIABLE HAS BEEN INSTAMINATED, SPECIFICAT CONTS.
DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER FAILED COMPONENT NAME	#H-04-9014-F	FAILURE HODE-FAIL DURING OPERATION-YAW DRIFT OUT-OF-TOLERANCE, CAUSE, FAILED TRANSISTOR OF 2NSSS, RESISTOR RZD AND TRANSFORMER II, ALL DAMACED BY OVERHEATING. COMPONENTS LOCATED IN RATE TURQUER AMPLIFIER. CARRECTIVE ACTION-TORQUER AND SIGNAL AMPLIFIERS HAVE BEEN REDESIGNED, ENSSS TRANSISTORS REPLACED BY EMASS. HEAT SIN AND CALLEBED. CICLSSSS, ECPSSS, CIC 14089, CICL4412, CICL4597, VENDOR SILVER SOLDERED PIN B TO END CAP, HELTING POINT	AA61-0137/PE-401-00-111 G7RO-D13PLACEMENT	FAILURE MODE-ELECTRICAL BHORT. BI POD COOLING DUCT CONDESATION DRIPPED ON FIDDS UNBILICAL PLUG CALSING THE GYRO EMM ITTER FOLLOMED, VOLTAGE TO BE GROINDED AT THE UNBILICAL (YAM CHANNEL). SYSTEM EFFECT-OMERATION STOPS PREMATURELY. THE YAM GYRO COALD NOT BE MILLED AND THE GYRO MULL INDICATOR LIGHT CAME.	VEHICLE EFFECT-COUNTDOAN DELAYED. 27 MINUTES. CORRECTIVE ACTION-THE UNDILICAL UMS DRIED WITH GHE AND SEALED WITH DC-7 COMPOUND. A RED TAPE WATER SHIELD WAS DEVISD.	98-04-239	FAILURE MOCE-OUT OF TOLERANGE, DURING YAM GUIDANCE SLAVING TEST, THE CANISTER GAINS WERE IS PERCENT ABOVE MOMINAL A 1 4 AND 8 WOLTS PEAK TO FEAR IMPUT, FAILURE ANALYSIS DID NOT COMFIRM THE FAILURE. THE CHANGE IN AMPLIFIER GAIN SINCE LEAVING THE FACTORY WERE INSIGNIFICANT, THE DIFFERENCES NOTED AT ETR ARE ATRIBUTED TO DIFFERENCES BETWEN FACTORY AND SITE TEST GOUTPMENT, MY CORRECTIVE ACTION-A NEW FECHER THAS HARE HAS BEEN INSTALLED AT EIR, WHEN THIS EQUIPMENT IS PROFERLY CALIBRATED THE DIFFERENCES IN TEST SETS BHOKED BE MINIMIZED, SPECIFICATION REQUIREMENTS ARE BEING REVIENCE TO OBSTERNIME IF IT IS POSSIBLE TO BROADEN FIELD TEST REQUIREMENTS.
****	STRIEN SUB-WWHEN	AUTOPILOT- SQUARE-A/B GYRO PACKAGE	FAILURE MODE-FAIL DURING TRANSFORMER TI, ALL DAMAGI CURRECTIVE ACTION-TORQUE RS IMPROVED, CICISSOS, EC	AUTOFILOT - SQUARE - A/B GYRO PACKAGE	FAILURE MODE-ELECTRICAL ITTER FOLLOMEN, VOLTAGE TO SYSTEM EFFECT-OMERATION ON.	VEHICLE EFFECT-COUNTDOWN DELAYED. 87 MINUTES. CORRECTIVE ACTION-THE UNGILICAL WAS DRIED MIN	AUTOPILOT-SQUARE-A/8 GTRO PACKAGE	FAILURE MODE-OUT OF TOLES T 4 AND 8 WOLTS PEAK TO FI LCAVING THE FACTORY WERE AND SITE TEST EQUIPMENT.N ROPERY CALIBRATED THE DI O DETERMINE IF IT IS FOSS

CORRECTIVE ACTION—A NEW FECHER TABLE HAB BEEN INSTALLED AT ETR. WHEN THIS EGUIPMENT IS PROPERLY CALIBRATED THE DIFF ERENCES IN TEST SETS SHOULD BE MINIMIZED. SPECIFICATION REQUIREMENTS ARE BEING REVIEWED TO DETERMINE IF IT IS POSSIB LE TO BROADEN PIELD TEST REQUIREMENTS.

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****	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥				
37.57EH \$U\$-5Y\$TEH	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF T	817E 1	PRI VE	SITE PRI VENDOR NAME	
AUTOFILOT-SQUARE-A/B	8H-D4-E71	FAR E7-4520E-1	33E F	FORBES	7 E.S		
FAILURE MODE-FAILED TO G R. MO CANISTER DISCREPANC DUE TO HUMAN ERROR BINCE.	FAILURE MODE-FAILED TO CPERATE AT PRESCRIBED TING-THE ROLL GUIDANCE VOLTAGE FAILED TO OPFRÄTE THE TORQUING AMPLIFIE R. MO CANISTER DISCREPANCIES COULD BE FOUND DURING FAILURE ANALYSIS, IT MAS CONCLUDED THAT THE APPARENT FAILURE MAS DUE TO HUMAN ERROR SINCE BASE PERSONNEL MERE CERTAIN THAT GROUND SUPPORT EQUIPMENT MAS OPERATING NORMALLY.	GUIDANCE VOLTAGE FA NALYBIS, IT WAS CON- CUND SUPPORT EQUIPM	ILED TO OPF CLUDED THAT ENT MAS OPE	RÄTE THE THE APPA RATING W	TORGU ARENT ORMALL	ING AMPLIFIE FAILURE WAS Y,	
CORRECTIVE ACTION-RELIAB UMAN ERROR, OR EQUIPMENT. 13TER HAS FAILED.	RELIABILITY WILL MONITOR THIS TYPE OF FAILURE TO DETERHINE IF IT IS A FAILURE OF THE PROCEDURE, H IPMENT, FIELD PERSONNEL ARE CAUTIONED AGAINST REJECTING CANISTER BEFORE IT IS CERTAIN THAT THE CAN	LURE TO DETERMINE II HST REJECTING CANIS	F IT IS A F	AILURE OI IT IS CES	F THE RTAIN	PROCEDURE, H THAT THE CAN	
AUTOFILOT-SQUARE-A/B GYRO PACKAGE	C1-98-04-003	FAR 55-41002-5	104D E	ETR	YES 60/C	ý	891378
FAILURE MODE-ERRATIC OPE ED 9LOM.	IIC OPERATION. UNIT REJECTED FOR ERRATIC DRIFT NOTED IN THE ROLL CHANNEL AND THE SFIN MOTOR APPEAR	RIFT NOTED IN THE R	OLL CHANNEL	AND THE	S.	HOTOR APPEAR	·
CORRECTIVE ACTION-NOWE.	FAILURE WAS NOT CONFIRMED.						
AUTOFILOT-SQUARE-A/B	AE61-0561/FC-4CO-02-093 DISPLACEMENT 6YRO	COMPOST TE-FACTORY	930 F.	FACTORY	5.65 5.65 5.65 5.65 5.65 5.65 5.65 5.65	Ų	092660
FAILURE MODE-FAIL BURING ITCH PROGRAM BUE TO FAULT	FAILURE MODE-FAIL DURING OPERATION-PITCH DISPLACEMENT GYRO MALLING WAS NOT PRESENT AFTER TEANIMATION OF SUSTAINER ITCH PROGRAM DUE TO FAULTY MALLING AND BUCROUT AMPLIFIERS IN THE AGE.	MALLING WAS NOT PRE: THE AGE.	BENT AFTER	TEAMINA TI	5	SUSTAINER P	
BYBTEM EFFECT-IMPROPER ANALOG BIGNALS.	HALDE SIGNALS.						4
VEHICLE EFFECT-COMPOSITE	VEHICLE CFFECT-COMPOSITE RE-SCHEDULED. COMPOSITE RETEST WAS REQUIRED.	REGUIRED.					
CORRECTIVE ACTION-THE NU	CORRECTIVE ACTION-THE NULLING AND BUCKOUT AMPLIFIERS IN THE AGE NERE REPLACED.	AGE WERE REPLACED.	-	- 1			
AUTOPILOT-SUUARE-A/B BYRO PACKAGE	AE61-0632/FC-6CO-01-006	COMPOST TE-PACTORY	610713	FACTORY	2 <u>2</u>		40000
FAILURE MODE-ERRATIC OFFRATION, UNE DUE TO FAULTY PROGRAPHER TEST TAPES.	FAILURE MODE-ERRATIC OFLAATION, UNEXPECTED MOVENENTS MERE OBSERVED ON ENGINE DATA AT VARIOUS TIMES DURING THE TEST OUR TO FAULTY PROGRAMMER TEST TAMES.	BSERVED ON ENGINE D	ATA AT VARI	OUB TIME!	DUR.	NG THE TEST	
SYSTEM EFFECT-ERRATIC OPERATION.	ERATION.						
VEHICLE EFFECT-COMPOSITE	VENICLE EFFECT-COMPOSITE RESCHEDULED. COMPOSITE RERUM AFTER REPLACING TAPES.	REPLACING TAPES.					
CORRECTIVE ACTION-REPLACED AGE PROGRAMMER TAPES.	ED AGE PROGRAMMER TAPES.						
						4 2 4 5 6 6 7 6 7	_

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

3737EH 348-3737EH	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE 8 DATE DIF TIM	SITE PRI	VENDOR HAME VENDOR PART HO	
AUTOPILOT-SAURE-A/B	MD-90-04-237F AMPLIFIER 67RO-DISPLACEMENT	FAR 27-41002-641	970 WTR 610709	7E.9		692156
FAILURE MODE-OUT OF TOLERAL THE ROLL GYRO WAS EXPREDICLY ARINGS WERE COVERED MITH A I ESISTORS NERE BURNED AND TH MAISTOR 6-7 TYPE 21539 MAS	FAILURE MODE-OUT OF TOLERANCE. THE ITEM SHONED LOW TORQUING SENSITIVITY DURING YAW TORQUE TESTS, IT WAS FOUND THAT THE ROLL GYRO S/N 1012-D WAS DISASSEMBLED. THE BE ARINGS WERE COVERED WAS DISASSEMBLED. THE BEARINGS WITH A FIBROUS RESIDUE FIBER RETAINERS HERE BURNED AND CRACKED AT BOTH BEARINGS. THE R-20-R-22 RESISTORS WERE BURNED AND THE ROLL TORQUER AMPLIFIER S/N 156. TRAMSIONS WES SHOWED. AND SHOULTERS.	SENSITIVITY DURING ROUED. THE ROLL GYRK ERE BURNED AND CRACK CRACKED OPEN ON THE FIER.	YAW TORQUE TO SAN 1012-D (ED AT BOTH B): ROLL TORQUE	ESTS. IT MAS DISAS EARINGS. RAMPLIFI	WAS FOUND THAT SEMBLED. THE BE THE R-20-R-22 R ER S/N 156. TRA	
CORRECTIVE ACTION-THE TO EMSS TRANSISTORS AND IN THORS HAVE BEEN WRITTEN.	CROVER AND SIGNAL AMPLIFIERS MPROVING THE TRANSISTOR HEAT	HAVE BEEN REDESIGNED INCLUDING CHANGING THE 2N339 TRANSISTOR TO SINKS. RARS 98-04-664 AND 665 COVERING CANISTER HANDLING PRECAU	IING CHANGING 165 COVERING	THE 2N33	9 TRANSISTOR TO HANDLING PRECAU	
AUTOPILOT-SQUARE-A/B GTRO PACKAGE	98-04-272 AMPLIFIER	FAR 27-45202-1	610705 ETR-J	-1 YES		894565
FAILURE MODE-OUT OF SPE LIMITS ARE .03620394. HE FACTORY. A SHALL OWAN	FAILURE MODE-OUT OF SPECIFICATION. THE PITCH BLAVING 2 VRHS LIMITS ARE .03620394. AMLYSIS COMFIRMED THE FAILURE. THE ME FACTORY. A SMALL CHANGE IN AMPLIFIER GAIN CAUSED THE CALI	VRHS WAS OUT OF TOLERANCE. THE VALUE CBTAINED WAS .0397 AND THE PITCH SLAVING HAD BEEN MARGINAL WHEN THE CANISTER LEFT ? CALIBRATION TO BECOME OUT OF SPECIFICATION.	E. THE VALUE EN MARGINAL IT OF SPECIFI	OBTAINEC HEN THE ZATION.	WAS .0397 AND CANISTER LEFT .	
CORRECTIVE ACTION-A REVIEW	OF FACTORY AND FIELD PROPER AND IF WIDER	TEST TOLERANCE SPECIFICATIONS IS BEING COND TOLERANCES SHOULD NOT BE USED IN THE FIELD.	S BEING COND! N THE FIELD.	KTED TO	DETERMINE IF TH	
AUTOPILOT-SQUARE-A/B 67RO PACKAGE	98-04-228 Amplifier	FAR 27-45202-1	610626 ETR	22		895853
FAILURE HODE-OUT OF SPEC NO THE ROLL DISPLACEMENT REMEMT HAS ATTRIBUTED TO	FAILURE MODE-OUT OF SPECIFICATION. THE PITCH RATE AMPLIFIER SUM WAS SLIGHTLY OUT OF SPECIFICATION ON THE NIGH END A NO THE ROLL DISPLACEMENT AMPLIFIER WAS SLIGHTLY OUT OF SPECIFICATION ON THE HIGH END. THE OUT OF SPECIFICATION WEASU ROMENT WAS ATTRIBUTED TO DIFFERENCES BETWEEN FACTORY AND SITE CHECKOUT EQUIPMENT.	SUM WAS SLIGHTLY OF FICATION ON THE HIGH CHECKOUT EQUIPMENT	IT OF SPECIFIC	CATION OF	THE HIGH END A	
CORRECTIVE ACTION-NOME.	FAILURE MAS NOT CONFIRMED.					
AUTOPILOT-SQUARE-A/B GYRO PACAACE	AESI-0240/P1-503-00-17 PITCH DISPLACEMENT GYRO	P.194T	17E WIR 610622 15	A TES	YES KEARFOTT	

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FAILUME MODE-FAILED DUMING OPERATION. PITCH DISPLACEMENT GYRO SPIN MOTOR RUNNING AT AN AVERAGE REDUCED SPEED OF 64 PCT OF 24,000 RFM RESULTED IN A 56 PCT GREATER PITCHOVER RATE.

STRTEM EFFECT-OPERATION TOO HIGH. VEHICLE PITCH RATE WAS EXCESSIVE.

GENERAL DYNAMICS CONVAIR DIVISION

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	VEHICLE SITE PRI VENDOR MANE DATE DIF TINE DIF OTH VENDOR PART NO	TIER STACE PUTCH PROCRAM RESULTING IN SUSTYMERNER HYDRAULIC PRESSURE AT 9 FCRCES AND VERNIER FAIRING COLLAPSE. AND BLOSH.	DETECTION (IE MAS HOT CONF THE STSTEM OR	ACTUAL MALFUNC : EFFORT TO LOC		MISTER HAD REH RTED TRANSISTO H TORGUER AMPL			EALED THAT THE EAGGG RPH REG DUE TO LACK OF	E FAILURES. SI ARE USED IN AL
	9 N N N N N N N N N N N N N N N N N N N	ROCRA AULIC R FAI	; . c	88	7 11.08	THE IN AN	T O	# CA	E E	5 Q	A PEC	THE SON
	SITE TIME DIF	PUTCH PUTER HYDRE DO VERNIE	N SERIEL	E 53	CONFONER	INE WERE BUIPPENT	FORBES	.IFIER. T N REVEALE ID OF THE	LY DETER	ETR	ANALYSI O RFH RE GYRO FA	CAUSE OF HE CTO &
¥	VEHICLE DATE DIF	STER STAGE SUST/VERP FORCES AN	ONNECTED 1	3F 610621	L AMPLIFIE	TO DETERMI	ERE 610610	ROUER AMPLE E ANALYSIN RCUIT BOAR	E DEFINITE	R2E 610608	E. FAILURE SPEED (000 ACKED, 1HE	AERVICE. 1
PILOT SYSTEM-AIRBOR	DIF DATA BOURCE PART NUMBER	VER RATE BURING BOOKE LOSS OF EXTREME AERODYNAMIC AERODYNAMIC AERODYNAMIC HEATING	AND F R AND D HISS OF SYNC AND BESING O	FAR 27-45202-1	ROM THE PITCH SIGNA O A MALFUNCTION OF 8	ILURE IN AN EFFORT ED TO CHECK GROUND	FAR 27-45202-1	D A FAULTY PITCH TO THE APPLIED, FAILUR RHER ON THE ASAE CI	THE PAILURE COULD NOT BE DEFINITELY DETERMINED.	7AA 87**45208**1	WAS OUT OF TOLERANG REACH SYNCHROWOUS WAS PONDERED AND CR	ILUME TO DETERMINE HAS BEEN PLACED IN NTEMPEMENCE BASIS:
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER FAILED COMPONENT NAME	VEHICLE EFFECT-IMPROPER TRAJECTORY, DUE TO EXCESSIVE PITCHOVER RATE DURING BOOSTER STACE PITCH PROGRAM RESULTING IN LOSS OF HISSILE AT 100 BECS DUE TO AERODYMANIC HEATING AND/OR LOADING. LOSS OF SUBTYVERNIER HYDRAULIC PRESSURE AT 9 7 SECONDS DUE TO LEAK IN ONE GUARTER INCH HP LINE CAUSED BY EXTREME AERODYNAMIC FORCES AND VERNIER FAIRING COLLAPSE. UMUSULL INCREASE OF LOX TANK PRESSURE AT 78 SECONDS DUE TO AERODYMANIC HEATING AND BLOSH.	CORRECTIVE ACTION-ECP 1001 EFFECTIVE ON RF AND SUBSEQUENT E AND F R AND D MIBSILES. SPIN MOTOR ROTTY TO SAKE) WILL DETECT ANY RATE OR DISPLACEMENT GYRD RUMNING OUT OF SYNC AND BEING CONNECTED IN SERIE. BY CAT. WILL AUTOMATICALLY PREVENT LAUMCH.	236	FAILURE MODE-FAILED DURING OPERATION, THERE WAS NO OUTPUT FROM THE PITCH SIGNAL AMPLIFIER. THE FAILURE WAS NOT COMP IRMLD, IT WAS CONCLUDED THAT THE AFFAFENT FAILURE WAS DUE TO A MALFUNCTION OF SOME OTHER COMPONENT OF THE SYSTEM OR TO A MUMAN ERROR.	CORRECTIVE ACTION-RELIABILITY IS MONITORING THIS TYPE OF PAILURE IN AN EFFORT TO DETERNINE WAERE THE ACTUAL MALPUNC TOW OCCURRED, FIELD RELIABILITY PERSONNEL HAVE BEEN REQUESTED TO CHECK GROUND SUPPORT EQUIPPENT IN AN EFFORT TO LOC TE THE CAUSE OF FAILURE.	94-04-240 Amplifica/Transistors	FAILURE MOCE-FLECTRICAL BHORT, SYMPTONS OF PAILURE INDICATED A FAULTY PITCH TORGUER AMPLIFIER. THE CANISTER HAD REH AINED ON THE MISSILE DURING A 36 DAY PERIOD MITHOUT MONER DEING APPLIED, FAILURE ANALYSIS REVEALED SHORTED TRANSISTORS RS G-7/48, BOTH H6 TRANSISTORS, AND AN OVERHEATED TE TRANSFORMER ON THE ASAE CIRCUIT BOARD OF THE PITCH TORGUER AMPLIFIER.	CORRECTIVE ACTION-NO CORRECTIVE ACTION AS THE CAUSE OF THE	FAR 6780-018FLACEMENT, FITCH 87M 974D/B 87-452DE-1 EARING	FAILURE MOE- OUT OF TOLERANCE, THE PITCH GYRO SENSITIVITY WAS OUT OF TOLERANCE, FAILURE ANALYSIS REVEALED THAT THE PITCH GYRO (3/M \$740) WAS AUDIBLY MOISY. THE GYRO WOULD NOT REACH SYNCHROMOUS SPEED (6000 RPH REACHED-RAGGO RPH REQUIRED). SPIN MOTOR BEARINGS MERE DRY AND THE FISER RETAINER WAS PONDERED AND CRACKED. THE GYRO FAILED DUE TO LACK OF LUDRICATION.	CORRECTIVE ACTION-RELIABILITY IS MONITORING THIS TYPE OF FAILURE TO DETERMINE THE EXACT CAUSE OF THESE FAILURES. SI NEE AUGUST 1981, A MEW CTO GYRO WITH AH IMPROVED SPIN MOTOR HAS BEEN PLACED IN SERVICE. THE CTO SYROS ARE USED IN AL L MEW CAMSSTERS AND ARE REPLACING THE OLORE FYROS ON A NOW-INTERFERENCE BASIS.
		OPER TRAJECT NO SECS DU R IN CINE QUI LOX TANK PI	PATE CA DICALLY PREVI	90-04-234	DURING OPEI XED THAT TH	FLIABILITY PELIABILITY URE.	9H-04-240 AMPLIFIER	CAL SHORT. DURING A 34 NAMSISTORS,	CORRECTIVE	A-98-0 6780-0 EARING	TOLEKANCE.	LIABILITY I W CTO GTRO RE REPLACIN
8961 NOT 11	SYSTEM S-B-SYSTEM	VEHICLE EFFECT-IMPRO- LOSS OF MISSILE AT 1 SECONDS DUE TO LEAK UNUSULL INCREASE OF	CORRECTIVE ACTION-ECP 1001 EFFECTIVE ON ELSMA) WILL DETECT ANY RATE OR DISPLACEMENT DY CRI, WILL AUTOMATICALLY PREVENT LAUNCH.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-FAILED IRMLD, 17 MAS CONCLUD TO A MUMAN ERROR,	CORECTIVE ACTION-RELIAB 110N OCCURRED, FIELD RELE ATE THE CAUSE OF FAILURE,	AUTOFILOT-SQUARE-A/B	FAILURE GODE-FLECTRI AIMED ON THE MISSILE RS G-7/48, BOTH HG TR IFIER,	TIVE ACTION-NO	AUTOFILOT-SQUARE-A/B GYRO PACKAMI	FAILURE MOE- OUT OF FITCH GYRO 13/M BYAD IRED), BPIN MOTOR BE. LUDRICATION,	CORRECTIVE ACTION-REI NEE AUGUST 1961, A NEI L NEW CAMSTERS AND A

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		DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	ILOT BYSTEN-AIRBOR!	į.				_
	SYSTEM SW-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	0 m	VENDOR NAME VENDOR PART NO	
	AUTOFILOT - SQUARE - A/B GTRO PACKASE	C1-98-04-002 D13PLACEMENT 67RO	FAR 53-41002-5	610606	A II	# Q	YES KEARFOTT NO	••10
	FAILURE WODE-OUT OF TOLERANCE. DEFORMED FLEX LEADS DRAGGING ON	FAILURE MODE-OUT OF TOLERANCE. UNIT WAS REJECTED FOR INDICATION OF STICTION DURING CHECKOUT. FAILURE ATTRIBUTED TO REFORMED FLEX LEADS DRAGGING ON THE CIRCUIT BOARD.	IION OF RTICTION DU	NING CHECK	out. FAI	2	ATTRIBUTED TO	
	CORRECTIVE ACTION-VEHDO	ON-VENDOR REGUESTED TO IMPROVE QUALITY CONTROL IN THIS AREA.	CL IN THIS AREA.					
	AUTOPILOT - SQUAPE-A/B	98-04-269	FAR E7-41002-629	610605	C-813	ž š		
	FAILURE MOE-OUT OF SPEC ED THAT THE FAILURE MAS (FAILURE MOE-OUT OF SPECIFICATION IN THE PITCH CHANNEL. FAILURE ANALYSIS DO NOT COMFIRM ANY FAILURE. IT MAS CONCLUD D THAT THE FAILURE MAS NOT IN THE CANISTER. THE FAILURE MAY HAVE BUEN DUE TO UNKNOWN DISCREPANCIES IN ETR TEST EQUI MENT.	FAILURE ANALYSIS DO NOT COMFIRM ANY FAILURE. IT UMS CONCLUD MAY HAVE BUEN DUE TO UMENOMN DISCREPANCIES IN ETR TEST EQUI	T CONFIRM NENOWN DIS	ANY FAIL	ES IN	ET WAS CONCLUD	
	CORFECTIVE ACTION-THE PL CHANGES, A FECHER TABLE I AILURES OF THIS TYPE SHO	CORFECTIVE ACTION-THE TOLERANCE SPECIFICATIONS IN THE FACTORY AND AT ETR ARE BEING REVIEWED TO DETERMINE NECESSARY CHANGES. A FECHER TABLE HAS BEEN INSTALLED IN THE GYRO LAB AT ETR. WHEN THIS NEW EQUIPMENT IS PROPERLY CALIBRATED, F AILURES OF THIS TIME SHOULD BE ELIMINATED.	RY AND AT ETR ARE B T ETR. MMEN THIS NE	CING REVIEW W EQUIPMEN	MED TO E	PERLY	IME NECESSARY CALIBRATED, F	
	AUTOPILOT SAUARE-A/B GTRO PACKAGE	98-04-265 GTRO-DISPLACENENT	FAR 27-41002-829	10901	ETR	ž 3		:
	FAILURE MODE-STRUCTURAL G SCASITIVITY AND THE YA AULTY SPIN MOTORS. THE M	FAILURE MODE-STRUCTURAL. ALL DISPLACEMENT AMPLIFIERS MERE OUT OF TOLERANCE. THE PITCH GTRO S/N 590B EXHIBITED VARIN 6 SENSITIVITY AND THE YAM GYRO S/N 784D WAS AUDIBLY NOISY. THE FAILURE WAS CAUSED BY A BROKEN GIMBAL PIVOY PIN AND F AULTY SFIN MOTORS. THE MOST PRODABLE CAUSE OF FAILURE MAS HISHANDLING OF THE GYRO CANISTER.	UT OF TOLERANCE. TH HE FATLURE WAS CAUS SHANDLING OF THE GY	ME. THE PITCH GYRO IS CAUSED BY A BROK! THE GYRO CANIBIER.	RO S/N SOKEN GIV	SOB E	KAIBITED VARIN	···
	CORRECTIVE ACTION-FACTO	OM-FACTORY AND FIELD PERSONNEL HAVE BEEN REQUESTED TO TAFE EXTREME CAUTION WHILE HANDLING CAN.	UESTED TO TAPE EXTR S ACCOMPLISHED BY R	EME CAUTI	N WHILE	HANDL	O4-663.	1
1	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	98-04-274 67RC-D18PLACEMENT	FAR 27-45202-1	410531	E18-3	3 5		······································
	FAILURE HODE-OUT OF TOLERANCE. NOT CONFIRMED, HOMEVER, THE ROL RATE WHICH MAY HAVE BEEN DUE TO	TO OF TOLERANCE, THE MOLL DISPLACEMENT AMPLIFIER SUM WAS DETENNINED OUT OF TOLERANCE, THE PAILUNE WAS HOMEVER! THE ROLL STRO SENSITIVITY DID CHANGE DURING TESTING. ROLL STRO S/N 823D SHOWED A HIGH DRIFT HAVE BEEN DUE TO END PLAY IN THE SIMBAL '(NS.	IER BUM WAS DETERMI E DURING TESTING. F	NED OUT OF	7 TOLERA	F. J.	INE PAILUNE WAS ID A HIGH DRIFT	
1	CORNECTIVE ACTE	CM-THE VENDOR HAS BEEN NOTIFIED OF THIS PROBLEM. HE HAS BIVEN ASSURANCE THAT HIS QUALITY CONTROL IS MATION OR THE END PLAY TOLERANCE HAS BEEN RESULSTED FROM THE VENDOR. REPERENCE RAR 98-04-463. THE VE	LEM. HE HAB BIVEN J	ISSURANCE INDOR. REP	THAT HIS ERENCE R	AN BA	177 CONTROL 18- 04-663. THE VE	

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GENERAL DYNAMICS CONVAIR DIVISION DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

8981 WAT 11

SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE	VEHICLE BITE DATE DIF TIME DIF	BITE PF	PRI VENDOR NAME OTH VENDOR PART NO	
NOOM HAS BEEN REQUESTED TO	TO INSURE THAT THE SAPPHINE BEANINGS ARE NOT CAUSING WEAR IN THE GINBAL PINS.	ARE NOT CAUSING WE	AR IN THE	GINBAL PIN		•1574
AUTOFILOT-SQUARE-A/B	9K-04-224 Meater	FAR 27-45202-1	10E 610529	FORBES YE	YES NO	98138
FAILURE MODE-SHORT (ELECT LERANCE DUE TO A SHORTED (FAILURE MODE-SHORT (ELECTRICAL). THE OUTPUT VOLTAGE FROM THE ROLL DISPLACEMENT GYRO FINE HEATER MAS HIGH. OUT OF TO LERANCE DUE TO A SHORTED COIL IN THE MACHETIC AMPLIFIER TEMPERATURE CONTROL CIRCUIT.	E ROLL DISPLACEMENT ERATURE CONTROL CIR	GYRO FINE	HEATER MA	HIGH. OUT OF TO	
CORRECTIVE ACTION-THE FA.	FAILURC WIS ATTRIBUTED TO HUMAN ERROR OR FAILURE IN GROUND SUPPORT EQUIPMENT. RELIABILITY WILL FAILURE TO ESTABLISH AND ELIMINATE THE CAUSE OF FAILURE.	OR FAILURE IN GROW E CAUSE OF FAILURE.	AD SUPPORT	EGUIPHENT	. RELIABILITY WIL	
AUTOFILOT-SQUARE-A/B	98-04-209 6780	FAR 27-45202-1	610526	ETR NO	3/09 0	998970
FAILURE HODE-OUT OF TOLE!	TOLERANCE. DURING GYRO LAB TESTS, THE SUM OF THE PITCH DISPLACEMENT GYRO OUTPUTS WAS OUT OF TOL	UM OF THE PLICH DIS	PLACEMENT	EVRO OUTPU	IS IMS OUT OF TO.	
CORRECTIVE ACTION-FAILURE TIES. ACTION BEING TAKEN	AILURE NOT CONFIRMED. FAILURE INDICATIONS PROBABLY DUE TO ETR AND FACTORY TEST SET INCOMPATIBILI AKEN TO ELIMINATE TEST SET INCOMPATIBILITIES.	S PROBABLY DUE TO E	TR AND FAC	TORY TEST	SET SHCOMPATIBILI	
AUTOPILOT-SQUARE-A/B GYRO PAURAGE	98-04-276 Gyrogcope-displacement/resistor	7AR 27-45802-1	10E 610526	ETR YES	YES NO	*15749
FAILURE HODE-OUT OF YOLES E DROPPED TO ZERO, AMALYSI HOT HAVE BEEN OME MITH TO	OF YOLEHAMEE. THE PITCH FINE MEATER EXMIBITED AN INTERMITTENT OPERATION AND THE FINE MEATER VOLTAGE AMALYSIS INDICATED THAT THE FAILURE MAD DUE TO A MEAT SENSITIVE SERIES RESISTOR. THE RESISTOR MAY WITH THE CORRECT TOLERANCE.	TED AN INTERNITTENT UE TO A HEAT SENSIT	OPERATION IVE SERIES	AND THE FI	INE HEATER VOLTAGE THE RESISTOR MAT	
CORRECTIVE ACTION-SINCE THIS IS LIABILITY WILL MONITOR THIS TYPE E PROBLEM AND HAS ASSURED RELIABI	CORECTIVE ACTION-SINCE THIS IS THE FIRST REPORTED FAILURE OF THE GYROSCOPE CAUSED BY A HEAT BENSITIVE LIABILITY WILL MONITOR THIS TYPE OF FAILURE TO DETERNINE IF A DESIGN CHANGE IS NECESSARY. THE VENDOR IS E PROBLEM AND HAS ASSURED RELIABILITY THAT THEY ARE USING THE APPROYED TYPE OF RESISTOR.	OF THE GYROSCOPE CA A DESIGN CHANGE IS E APPROVED TYPE OF	USED BY A NECESSARY. RESISTOR.	HEAT BENSITIVE THE VENDOR IS	IIVE RESISTOR. RE I 15 AWARE OF THI	
AUTOFILOT-SQUARE-A/8 GIRG PACKASÉ	93-04-20s 67RO	FAR E7-45302-1	#1031#	ETR YES		
PAILURE HODE-OUT OF TOLER	TOLERANCE, DURING GYRO LAB TESTS, THE YAW RATE GYRO SUHS WITH HIGH AND LOW EXCITATION AND THE RE OUT OF TOLERANCE.	AN RATE EYRO SUMS W	1 TH HIGH A	NO FOR	TATION AND THE R	
CORRECTIVE ACTION-PAILURE	AILUME MOT COMFIRMED. FAILUME INDICATIONS PROBABLY DUE TO ETR AND FACTORY TEST SET INCOMPATIBIL?	S PROBABLY BUE TO E	TR AND FAC	TORY 1287	LET 1 MCOMPATIBIL?	

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DIFFICULTIES REVIEW-AUTOFILOT STATEM-AIRBORNE

18 JUH 1966

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VENDOR NAME			PHASE TERMINAL	MLITY CONTROL.	3/05 t	. A-1-4-					HEATER WAS INTE. INT WICH CAUSED THE SPIN HOTOR	COUSTE CLESRANCE DEFECTIVE ASSEND SINTS HAS DEEN I HIGH DIELECTRIC	
VEHICLE SITE PRI		ETA YES	17 OF THE 8	H BETTER OL	FACTORY TES	NUT POMER SA				ETR YES	E YAW FINE MSING ELEME CIRCUIT OF	PROVIDE ADE CULL OUT D SOLDERED JO	ETR YES
VEHICLE DATE DIF T		21E E	· MIBALIGNMEN	ING TO OBTAI	49E 610515	O A BURRED C				1000 E	RATE AND TH NE HEATER SE E TO A SHORT	BUILD-UP TO TAGE TEST TO SPECTION OF SULATION DEP	#104E
DIF DATA SOURCE PART NUMBER		75.7 87-45808-1	ICEMENT GYRO DUE TO	NEM AND IS ATTEMPT LESENY PROBLEMS IS	COMPOST TE-FACTORY	TO FUNCTION DUE T		TEST MAS RERUN.		FAR 27-45302-1	CEHENT GYRO TORQUE 13E OF A DAMAGED FI 17M 729C) FAILED DU ACTION.	TANCES DURING GYRO ED EXTENDED OVERNOL EDX HICROSCOPIC IN GHIFICATION FOR IN	FAR 27-45502-1
TEST/REPORT NUMBER FAILED COMPONENT NAME	ACTION TO IMPROVE TEST SET COMPATIBILITY.	98-04-223 67RO-013FLACEMENT	FAILURE WODE-DRIFT-EXCESSIVE ROLL GRIFT RATE OF ROLL DISPLACEMENT GYRO DUE TO MISALIGNMENT OF THE B PMASE TERMINAL Post and a cold-soldem joint at the terminal commection.	CORRECTIVE ACTION-THE VENDOR HAS BEEN NOTIFIED OF THIS PROBLEM AND IS ATTEMPTING TO OBTAIN BETTER GUALITY CONTROL. NEW SERIES OF SYROS WITH IMPROVEHENTS TO ELIMINATE MANY (MESEN) PROBLEMS IS UNDER TEST.	AE61-0403/FC-5CO-01-049	IL DURING OPERATION-THE GYRO CANISTER FAILED TO FUNCTION DUE TO A BURNED OUT PONER SUPPLY.	DOES NUT START.	VEHICLE EFFECT-COMPOSITE RESCHEDULED, A PARTIAL COMPOSITE TEST WAS RERUN.	GYRO CANISTER WAS REPLACED.	9B-04-230 Gtro-diaplacemi	FAILURE WOOF- ELECTRICAL SHORT. THERE WAS A LOW ROLL DISPLACEMENT GYRO TORQUE RATE AND THE YAW FINE HEATER HAS INTE RHITTENI. THE DISPLACEMENT ROLL GTRD (87H 711C) FAILED BECAUSE OF A DAMAED FINE HEATER SENSING ELEMENT WHICH CAUSED THE LOW ROLL GTRO TORGUE RATE, THE DISPLACEMENT YAW GYRO (8/H 729C) FAILED DUE TO A SHORT CIRCUIT OF THE SPIN MOTOR STATCR TO SPIN MOTOR COVER GIVING INTERHITTENT FINE HEATER ACTION.	CORRECTIVE ACTION-THE VERDOR DECREASED THE CHARLATIVE TOLERANCES DURING GYRO BUILD-UP TO PROVIDE ADEQUATE CLEARANCE. TO ELIMINATE CROWDING OR ASSENDLY, THE VENDOR HAS INSTITUTED EXTENDED OVERVOLTAGE TEST TO CULL OUT DEFECTIVE ASSEND LIES, A PLASONNEL RETRAINING PROGRAM HAS BEEN INSTITUTED, A PUX MICROSCOPIC INSPECTION OF SOLDERED JOINTS HAS BEEN I NSTITUTED, INCOMING MINDING WIRE IS BEING CHECK UNDER 60X MAGNIFICATION FOR INSULATION DEFICIENCIES. MIGH DIELECTRIC AND A MCRCURY BATH TEST HAS BEEN INSTITUTED.	98-04-E83 AMPLIFIER RESISTOR
STSTEM BUG-STSTEM	TIES. IMITIATED ACTION TO	AUTOPILOT-SQUARE-A/B	FAILURE MODE-DRIFT-EXCES POST AND A COLD-BOLDER JO	CORRECTIVE ACTION-THE VE	AUTOFILOT-SQUARE-A/B	FAILURE MODE-FAIL DURING	SYSTEM EFFECT-OPERATION DOES NOT	VEHICLE EFFECT-COMPOSITE	CORRECTIVE ACTION-THE GY	AUTOFILOT-SQUARE-A/B	FAILINE MODÉ- ELECTRICAL RHITIENI, THE DISPLACEMEN THE LOW ROLL ETKO TORGUE STATOR TO SPIN HOTOR COV	CORRECTIVE ACTION-THE VERDOR DECREASED THE C TO ELIMINATE CROMDING OR ASSENDLY, THE VENDOR LIES. A PERSONNEL RETRAINING PROGRAM HAS BEEN NSTITUTED. INCOMING WINDING WIRE IS BEING CHE AND A MERCURY BATH TEST HAS BEEN INSTITUTED.	AUTOFILOT-SQUARE-A/8 GYRO FACKAGE

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FAILURE MODE-OUT OF TOLERANCE. THE YAM DISPLACEMENT AMPLIFIER SUM MAS OUT OF TOLERANCE, ANALYSIS VERIFIED THE FAILU RE, THE MOST PRUSABLE CAUSE OF THE FAILURE HAS A CHANGE III THE VALUE OF THE 3 PCT. RESISTORS DUE TO ENVIRONHENTAL CO-MOTITOMS.

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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VENDOR PART NO	1 PCT. RESISTORS OF THE HETALLIC TO ENVIRCHHENTAL CONDITIONS.	AND SHOULD HAV	TEST SPECIFICA	GYRO LAB TESTS	ING CHARACTERIS		DEG PER SECOND				YES KEARPOTT NO	MIBITED AUDIBL	PAGE 0464
ž 5	1883 141.	7 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ART.	2 2 ×	ERAT	¥ 6	.8				ž š	0	
VEHICLE SITE PRI DATE DIF TIME DIF OTH	T. RESIST	FAIRCHIL D MS ZERO W TERMINAL	ON THIS P	ETR PRATICALL	FERENT OF	3768-R	2.5 AND 1				PACTORY	Y. THE ST	
VEHICLE DATE DIF	ARE 1 PC DUE TO E	19E 610419 WOLTASE W ERMOSTAT	EILLANCE FOR DIFFE	#10408 CRATING E	A AND 017	93-0 910404	R CPS AT				10404	HE FACTOR	
DIF DATA BOURCE PART HUMBER	USED IN PRODUCTION ARE	ET-45045-1 ET-45045-1 AT THE GYRO HEATER T-CIRCUITING THE TH	INCREASE THEIR SURV	FAR 27-45302-1 bata MOTED TO BE C-	TH IMPROVED WINDIN	COMPOSITE - FRD / DPL	CILLATED AT 36 TO 4				FAR 7-04250-1	FINAL CHECKOUT IN T SPIN MOTOR BELIRING	en agranda de la compansa de la comp
TESTARFORT HUMBER FAILED COMPONENT NAME	ACTION-THE CALIBRATION RESISTORS PRESENTLY BEING USED IN PRODUCTION ARE 1 PCT. RESISTORS OF THE METALLIC THESE RESISTORS ARE NOTE RELIABLE AND ARE LESS SENSITIVE TO CHANCES DUE TO ENVIRONMENTAL CONDITIONS.	PK-D4-234 67RO-RAIE 67RO-RAIE WORT. THE MAHCHE TEST INDICATED THAT THE GYRO HEATER WOLTAGE WAS ZERO WOLTS AND SHOULD HAW E FAILURE WAS CAUSED BY SOLDER SHORT-CIRCUITING THE THERMOSTAT TERMINAL TO GROUND.		FAR BIO406 ETR NO BY PACRAGE DISPLACEMENT GYRO HEATER ET-45302-1 PY PACRAGE DISPLACEMENT GYRO HEATER WAS NOTED TO BE GYERATICALLY IN GYRO LAB TESTS	CHRECTIVE ACTION-MOME REQUIRED-LATER SCRIES GYRO MEATERS WITH IMPROVED WINDING AND DIFFERENT OPERATING CHARACTERIS ICS.	AD61-0117/Da-426/B2-4MO-02-65 Gyro-rate	FAILURE MUCE-OUT OF TOLERANCE, PITCH AND ROLL RATE SYRON ONCILLATED AT 36 TO 42 CPS AT 2.5 AND 1.33 DEG PER SECOND ESPECTIVELY.	ERATION.			A9-04-222 6480-8816	PAILUNE MODE-FAILED DUBING OPERATION-PAILED DURING MISSILE FINAL CHECKOUT IN THE FACTORY. THE GYRO EXHIBITED AUDIBL : MOISE DURING CHECKOUT. THE UNIT FAILED DUE TO DEPLETION OF SPIN MOTOR BEARING LUBRICANT.	
BVB-SYSTEM	C-MRECTIVE ACTION-THE CAL	67R3 PACRAGE F TLUME MOSE-ELECTRICAL 1	INSPEC T ARE	AUTOFILOT - SQUARE - A/B GYPA PACKAGE FAILURE MODE-FRRATIC OPEN	C. RRECTIVE ACTION-MOME RE	AUT YELOT-SQUARE-A/B	FAILURE MOEG-OUT OF TOLER RESPECTIVELY.	FYSTEM EFFECT-ERRATIC OFFRATION.	WENTELE EFFECT-NOME.	CORRECTIVE ACTION-UNRINOME.	AUTOFILOT-BOUARE-A/B	PAILUNE MODE-FAILED DURIN E MOINE DURING CHÉCKOUT. T	уснационализа воер населер бавругает путантизация выполнять в десе

13 JUN 1866

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRDORNE

THE STATE THE ACTION-THE WHOCH HAS INSTITUTED A SPECIAL CLEANING PROCESS TO INSUE REDOVAL OF HAND SPOIS FROM THE BEA. THE STATE THE STATE THE SEASING LUBRICANT HADDING PROCESS. TO INSUER REDOVAL OF HAND SPOIS FROM THE BEA. THE STATE THE STATE THE SEASING LUBRICANT HADDING PROCESS. THE FORMATION OF THE RETAINED DUSING THE PRETAINS DUSING THE SPOISON THE STATE THE		TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE FART NUMBER	VEHICLE DATE DIF	DATE DIF TIME DIF OTH	PRI VENDOR NAME	OH
COMPOSITE-FACTORY 35E FACTORY TES 610316 NO CLL TORBUINE GAINS WERE LONER THAN EXPECTED-THE 6780 CANISTER WAS FOWN AINS TOO LON. 6102 TESTING WITH ANOTHER CANISTER SHOWED BATISFACTORY GAINS. SINC COMPOSITE TEST WAS CONSIDERED ACCEPTABLE. COMPOSITE-PRD/DAL 970 1-E YES 87-41002-829 MESPONSE TO YAM GYRO TORBUING. EASTORY WE SECRETE TO THE GAINS WITH YES KEARPOTT EATER RAY AND SALITTING OPEN. FAR 610131 WITH YES KEARPOTT HIMED. COMPOSITE-FACTORY 18E FACTORY 10 BD/C 610186 10	CORRECTIVE ACTION-THE VENDOR HAS IN RING RETAINER THEREST INCREASING LU IN TIME SINCE THE BEARING LUBRICANT	NSTITUTED A SPECTAL CLEANI BRICANT MOLDING PROPERTIES IS APPLIED BY CREENING 1	NG PROCESS TO IMSU. THE VENDOR ALSO HE BATURATION OF T	RE NEMOVALINCREASED	THE SPIN	SPOTS FROM THE B HOTOR BEARING RU THE RUM-IN PENIO	
AINS TOD LOW. AINS TOD LOW. BITE TESTING WITH ANOTHER GIRO CANISTER SHOWED BATISFACTORY GAINS. SIMC COMPOSITE TEST WAS CONSIDERED ACCEPTABLE. COMPOSITE TEST WAS CONSIDERED ACCEPTABLE. COMPOSITE—FRO/DRL 970 1-E YES REAPFOTT 6102E3 NO EP-4100E-8E9 6102E3 NO EP-4100E-8E9 RESPONSE TO YAW GIRO TORSUIMS. FAR 80-04-073) FAR 80-04-073) ESTEUIT MOULD NOT TURN OFF. FAILURE DUE TO THE HEATER SENSOR CONTROLLY AND APLITTING OPEN. HIMED. COMPOSITE—FACTORY 18E FACTORY 10 60/C 6101E9 10	AE61-0268/ CANISTER	AES1-0268/FC-9CO-01-039 CAN137ER	COMPOST TE-FACTORY	35E 610316	FACTORY	7£8 HO	8040
AINS TOO LOW. SITE TESTING WITH ANOTHER GYRO CANISTER SHOKED BATISFACTORY GAINS. SINC COMPOSITE TEST WAS CONSIDERED ACCEPTABLE. COMPOSITE FROM THE PROPER SPEED. RESPONSE TO YAM GYRO TORBUING. (FAR 80-04-073) ER CIRCUIT WOULD HOT TURN OFF. PAILURE DUE TO THE HEATER SENSOR CONTROLLY AND SALITTING OPEN. HIMED. SOURCE TO COMPOSITE-FACTORY 18E FACTORY 10 80/C 41018.	ERANCE. THE W	ERHIER ROLL TORQUING GA!	NS WERE LONER THAN	EXPECTED	-THE 6780	CANISTER WAS FOU	9
COMPOSITE TEST MAS CONSIDERED ACCEPTABLE. COMPOSITE FEB MAS CONSIDERED ACCEPTABLE. COMPOSITE FROM 970 1-E YES E7-41002-429 SPINNING AT PROPER SPEZD. RESPONSE TO YAM GYRO TORBUING. EATER E7-41002-621 EATER E7-41002-621 CAMPOSITE FAR 610131 MTR YES KEARFOTT ER CIRCUIT MOULD NOT TURN CFF. FAILURE DUE TO THE HEATER SENSOR CONTROL LY AND SALITTING OPEN. 41 MED. 61018 70070 100 6070 61018 100 100 6070	LOW POLL	TOTAUTHE GAINS TOO LOM.					
COMPOSITE-FRO/DML 97D 1-E YES E7-41002-829 MO E7-41002-829 MO E8-61002-829 (FAR 90-04-073) FAR 80-04-073) EATER E7-41002-821 EATER E7-41002-821 EN CIRCUIT MOULD NOT TURN OFF. FAILURE DUE TO THE HEATER SENSOR CONTROL LY AND SMLITTING OPEN. 41960. 41960.	VEHICLE EFFECT-COMPOSITE DELATED. POR E THE DEFECTIVE GYRO CANISTER IS A SLA CORRECTIVE ACTION-MOT RACHAL.	T COMPOSITE TESTING MIT VE, THE COMPOSITE TEST	H ANOTHER GYRO CAN	ISTER SHO EPTABLE.	20 LA 11 LA	ACTORY GAIMS. SI	¥
COMPOSITE-FRO/DML 970 1-E YES 8102E3 NO E7-41002-429 MESPONSE TO YAM GYRO TORGUIMG. (FAR 90-04-073) EATER E7-4100E-821 EN CIRCUIT MOULD NOT TURN OFF. FAILURE DUE TO THE HEATER SENSOR CONTROL LY AND SALITTING OPEN. 41MED. 6101E8 FACTORY 10 60/C 6101E8 10						-	1
MESPONSE TO YAM GTRO TORGUIMG. (FAR 90-04-073) EATER E7-4100E-8E1 84013; WTR YES KEARFOTT EATER E7-4100E-8E1 NO. ER CIRCUIT MOULD NOT TURN OFF. FAILURE DUE TO THE HEATER SENSOR CONTROL LY AND SALITTING OPEN. HIMED. 418E0.	DASGA/LZ - 4MO01-97 YAM RATT 67RO	01-47	COMPOST TE-FRD/DML E7-4100E-429	970 616223	<u>.</u>	YES O	9 7 2 1 9
IFAR BD-04-073) EATER E7-4100E-6E1 610131 WTR YES KEARFOTT EATER E7-4100E-6E1 NO ER CIRCUIT MOULD NOT TURN OFF. FAILURE DUE TO THE HEATER SENSOR CONTROL LY AND SALITTING OPEN. HIMED. 4101E	CHFICATION, GYRO	NOT SPECIMENT AT PROF	ER SPEZD.				
EATER FAR 610131 WTR YES KEARFOTT EATER E7-41002-621 HOUSE TO THE HEATER SCHSOR CONTROL EN CIRCUIT MOULD NOT TURN OFF. PAILUNE DUE TO THE HEATER SCHSOR CONTROL LY AND SALITTING OPEN. HIMED. -018 COMPOSITE-FACTORY 18E FACTORY 10 60/C 610126 10	SYSTEM EFFECT-ERRATIC OMERATION. IMADES	UATE RESPONSE TO YAM	EYRO TORBUING.				
FAR PD-04-073) EATER FAR 610131 WTR YES KEARFOTT EATER E7-4100E-8E1 610131 WTR YES KEARFOTT ER CIRCUIT MOULD NOT TURN OFF. FAILURE DUE TO THE MEATER SENSOR CONTROL LY AND SALITTING OPEN. HIMED. G118 COMPOSITE-FACTORY 1SE FACTORY 10 60/C 610186	WEMICLE EFFECT-COMPOSITE DELAYED.						
FAR E7-41002-621 CUIT MOULD NOT TURN OFF. FAILURE DUE TO THE HEATER SENSOR CONTROL APLITTING OPEN. COMPOSITE-FACTORY 16E FACTORY 10 60/C 610128	CORRECTIVE ACTION-PEPLACED REMOTE RATE SYRO.	- 1				Abrabilish gappin in series ship in a same paparin series ag	
DETERMILY AND AMITTING OPEN. DETERMINED. COMPOSITE-FACTORY 18E FACTORY 10 60/C 610128	90-04-163 DISPLACEMENT GYRO HEATER	FFO HEATER	FAR E7-41002-621	610131	£ 5	YES KEARFOTT NO	***************************************
COMPOSITE-FACTORY 1SE FACTORY 10 610128	FAILLRE HODE-ELECTRICAL SHONT, YAN GYRO NACHETIC AMPLIFIER BHONT CINCUITING IN	D HEATER CIRCUIT MOULE FERNALLY AND SPLITTING	NOT TURN OFF. PATE	and and	THE HE	ITER SENSOR CONTR	ಕ
COMPOSITE-FACTORY 18E FACTORY 10	CORRECTIVE ACTION-NOME. CAUSE OF SHORT DETERMINED.	DCTERMINED.					
	AE81-0054/FC-9CO-01-018	\$CO-01-01\$	COMPOSE TE-FACTORY	195	FACTORY	1	
						PA6E 0465	15

13 208 1886	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBOR	¥			وحطنته فالإجتران وتخطيف فرياء بهاجون مأران ويستطي	٠.
STSTEM SUB-STSTEM	TEST/REPORT NUMBER	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	\$11£ 11ME D1F	PRI VENDOR	VENDOR HANE	-
STRICH EFFECT-LAPROPER ANALOG	AMICO HEMALI.						899048
VEHICLE EFFECT-COMPOSITI	VEHICLE EFFECT-COMPOSITE DELAYED. SYSTEM AID COMPOSITE RETEST MENE REQUIRED.	EST SERE RESULRED.				<u> </u>	
CORRECTIVE ACTION-INVENT	CORRECTIVE ACTION-INVENTIGATION REVEALED THE PROBLEM TO BE IN THE RGE STRO MALLING LOOP. EXACT CORRECTIVE ACTION PO RIGHN.	IN THE ASE STRO MA	11H6 LOOP.	EXACT CO	ARECT I VE	ACTION IS	
AUTOFILOT-SQUARE-A/B	BR-G4-E14 GTRO-D13PLACEMENT	FAR R7-41002-821	14E F.	A I RCH I .	463 50		* 0 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
FAILURE MODE-OUT OF TOL	TOLERANCE. THE ROLL DISPLACEMENT GYRO WAS ALDIBLY NOISY AND HAD A LOM TORGUING RATE.	MAS AUDIBLY NOISY AN	D HAD A LOS	4 TORBUÍM	6 RATE.		
CHRECTIVE ACTION-THE V	VENDOR IMS NOTIFIED OF THE PROBLEM.	PROBLEM. IMPROVEMENT IN QUALITY CONTROL WAS INSTITUTED.	TY CONTROL	LAS INST	110160.		
AUT PILOT-SQUARE-A/B	90-04-133 DISMLACEMENT GYRO RESISTOR	FAR E7-41002-821	7E 1	MTR	7E3		896613
FAILURE MODE-ELECTRICAL SW'UT SIGNALS, FAILURE M	RICAL OPEM, DURING AUTOPILOT SYSTEM TESTS THE YAW SIGMAL AMPLIFIER MOULD NOT URE WAS DUE TO A FAULTY SOLDER COSSECTION ON RESISTOR R-30 OF THE YAM SIGMAL	IS THE YAM STONAL AM ON ON RESISTOR R-30 (AMPLIFIER WOLLD NOT RESPOND TO TORBUTHE SO OF THE YAM SIGNAL A PLIFIER.	D NOT RE	A PLIFIER.	TORBUINE	
CONFECTIVE ACTION-GO/C	60/C RESIRECTED THE SOLDERING OPERATION FORE THE CALIDMATION BOARD IS RETURNED	SOLDERING OPERATION TO THE ELECTRONICS BUILD-UP AREA. THE BOARD IS RETURNED TO THE CANISTER FOR FURTHUR ELECTRICAL	SUILD-LP ARI	EA. THE S	SOLDERING IS THEN TESTS.	IS THEN T	
AUTOF ILOT - SQUARE - A/B GYRO PACKA7E	/E60-1013/FC-5CO-02-018 AMT, 171ER	COMPOST TE-FACTORY	14E 4012E0		9 9		*******
FATLURE MODE-OUT OF TOL	FAILUPE MODE-OUT OF TOLERANCE. THE SUSTAINER ENGINE MAS TORRUED AT AN EXCESSIVE RATE IMMEDIATELY FOLLOHING THE GUID ANCE EMABLE FUNCTION. CAUSED BY A FALLIT AIR MALLING AMPLIFIER.	ORAUED AT AN EXCESS!	VE BATE 1984	EDIATELY	FOLLOWIN	a the GUID	
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS	ANALOG BEGNALB.						
VEHIL E EFFECT-COMPOSIT	WENICLE EFFECT-COMPOSITE RUSCHEDULED. PARTIAL COMPOSITE RETEST WAS PERFORMED.	ETEST MAS MEMFORKED.					
CORRECTIVE ACTION-THE A	AGE MALLING AMPLIFIER WAS REPLACED.						
AUTOPILOT-BAUME-A/B GTRO PACKAGE	GR-04-18E DISPLACEMENT GYRO	FAR 7-41013-919	990	4	YES KEANFOTT NO	101	
FAILUSE MODE-OUT OF TOL LOW, THE YAW RATE SNIES OR AND SO/C MEAT STMK IN	N' TOLERANCE, DURING APCHE BYBTEM TEBTING THE YAN GYRO GAIN AI THE INPUT TO THE YAN INTEGRATOR WAS INTEGRATION OF THE INPUT TO THE STABILIZATION FILTER WAS ALSO LOM. BELIEVED DUE TO VEND ME INCOMPATAL'! ET	G THE YAM GYRO GAIN . HE STABILIZATION FIL.	A! THE IMPU TER MAB ALB	7 TO THE O LOM: BE	YAM IRTE	ME TO VEND	

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BUB-B-BIEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE PHI	VENDOR PART NO	
b - Angres elektrolisises estaptivariates adali elektrolagusesprantesprantesprantesprantesprantes	The second secon				*****
CORRECTIVE ACTION-FAILU FACTURING AND TESTING OF BE NADE TO ENSURE COMPAT	CORRECTIVE ACTION-FAILURE UNCOFTRHED. REARFOTT IS INITIATING A NEW MANUFACTURING PROCESS SPECIFICATION FOR THE FACTURING AND TESTING OF THE COMPENSATING RING. TESTING IS TO BE PERFORMED AT THE CANISTER LEVEL AND EFFORTS ARE BE MADE TO ENSUME COMPATABILITY BETWEEN VENDORS TESTING AND GOZA RECEIVING IMSPECTION.	TATING A NEW MANUFACTURING PRO TO DE PERFCRNED AT THE CANI AND GOVA RECEIVING IMSPECTION.	MING PROCESS SPECIFICATION THE CANISTER LEVEL AND SPECTION.	TION FOR THE MAU	
AUTOFILOT-SQUARE-A/B	PB-04-13E CIRCULT BCARD-TRANSLISTOR	FAR 27-41000-817	GO1110 ETR YES		• • • • • • • • • • • • • • • • • • • •
FAILURE MOE-SMORT (ELECT), DURING GY MERE UNSTABLE, TRANSISSOR 93 ON THE UR PPLICATION OF A LARGE ELECTRICAL LOND.	FAILURY WIDE-SWORT (ELECT), DURING GTRO LABORATORY TESTS THE STVIIC GAINS ON THE VI YAW AND VI PITCH/ROLL CHAMMELS Mere Unstable, transistor as on the Urasar circuit Board was smort circuited. Believed to be due to an imadvertent a PPLICATION OF A LARGE LLECTRICAL LOAD.	B THE STATIC GAINS ON I MAS SHORT CIRCUITED.	THE VI YAW AND VI PITCH BELIEVED TO BE DUE TO A	4/ROLL CHAMMELS IN IMADVERTER! A	
CORRECTIVE ACTION-THIS	CORRECTIVE ACTION-THIS IS THE FIRST RECORDED FAILURE OF THIS TYPE. GO/C INTENSIFIED SURVEILLANCE OF THIS COMPONENT.	THIS TYPE. GOVE INTER	ISTFIED SURVEILLANCE OF	THIS COMPONENT.	
AUTCPILCT-SAUME-A/B	AE60-0324/PE-401-00-05 COAFETOR	COURTDOM	550 12 YES \$01022 -4200 NO		1979
FAILURE MODE-ELECTRICAL	FAILUPE MODE-ELECTRICAL OPEN, SKOKEN WIRE IN PLUG PB01 TO GYRO CANISTER.	TO GYRO CANISTER.			
SYSTEM EFFECT-OPEN TION	SYSTEN EFFECT-OFERFIION DOES NOT START. SUSTAINER ENGINE WOLLD NOT RESPOND IN YAM PLANE.	A WOULD NOT RESPOND IN	TAN PLANE.		
WEHICLE EFFECT-COUNTDOM	VEHICLE EFFECT-COURTDOWN DELAYED. PREVIOUSLY CALLED HOLD EXTENDED 170 MINUTES WITH 35 MINUTE RECYCLE.	D CXTENDED 170 HIMUTES	WITH 35 MINUTE RECYCLI	ដ	
CORRECTIVE ACTION-WIRING	G REPAIRED.	e de la companya del la companya del la companya de	. An and the state of the state	To the state of th	
AUTOFILCT-SUMME-AZE GYBO PAC (AGE	98-na-119 Gyro-displacement-wiring	FAR M7-41008-681	SE ETR YES		984172
FAILUFE MODE-SHORT (ELE M MOTOR FLEM LEAD BHORT	FAILUFE MODE-SMORT (ELECT), DUMING TESTING THE YAW DISPLACEMENT GYRO SPIN MUTOR WAS INCPERATIVE. FAILURE DUE TO SPI N MOTOR FLEX LEAD SMORT CIRCUIT TO SPIN MOTOR COVER CAP ASSEMBLY.	LACEKENT GYRO SPIN NOT ASSENBLY.	IOR WAS INCPERATIVE. FA	ILURE DUE TO SPE	
CORPECTIVE ACTION—(1) 6 GYRUS E.MYETED AND REPLA	COMPECTIVE ACTICH-(1) GYRO VENDOR ELECTRICALLY INSULATED THE INSIDE OF THE COVER CAP ABSEMBLY (2) ALL DISPLACEMENT GYRUS EJRYEIED AND REPLACED WITH UNITS INCORPORATING INSULATED COVER CAPS.	D THE INSIDE OF THE CO	OVER CAP ABSEMBLY (2) A	LL DISPLACEMENT	
AUTOFILO - BAUARE-A/B	BS-04-10% DISPLACEMENT SYRO MEATER	FAR 27-41002-807	EE SYCAMORE YES		
THE LACE AND					

		***************************************	***************************************		4	*******		•••			
	VENDOR NAME	(BACON LAB.LCA-2).		ISTS BUT WAS REINE CORRODED.	E. INSTITUTE U TORAGE DESSICAT MITS IN POSITI TO CORROSION I		WOTED TO BE OUT	3/05	LURE MAS DUE TO DEGLATE CLEARAN	EED THROUGH AND	PAGE U440
***************************************	# 0 # T	BACC	ž Š	13	31.5. 31.7. 18.1E	¥6	· 되 당	ž Š	TA.	2	
	SITE PRI		2. E.	PASSED AL	REGUIRENCI TION, 4. U NS. ASSEM IS SUSCEPT	ETA	VALVES W	E TR	THERE MAS	EEN 14E 4	
7	VEHICLE DATE DIF	CONTAHINAT	600712	KCESSFULLY	IS WITHIN ING CPERATION OF CARE PARTIC	6 00 701	Ensitivity	600 600 621	NILY PESE! AL FRAME.	RANCE BET	
JOFILOT SYSTEM-AIRBO	SIF DATA SCURCE	TO CHAMEED TO A LEBB	FAR 27-410G2-825	SUB-SYSTEM TESTING THE GYRO ASSEMBLY SUCCESSFULLY PASSED ALL TESTS BUT HAS REVIERATION OF THE ROLL DISPLACEMENT GYRO. SPIN MOTOR BEARINGS WERE CORRODED.	DEW POINT OF HELIUM E DURING BEARING LAPP ISOLATE HAMFACTURIN E CEMENT INSTEAD, 6.	FAR 27-41002-623	DAITS PITCH SLAVING S T SET ERROR SUSPECTED	FAR 27-41001-067	PROGRAMMER INTERMITTE ER 4 BOALD TO THE MET	PROVIDE ADEQUATE CLEA	
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER FAILED COMPOMENT NAME	NT HOLDING THERMOSTAT SMITCH ON 6780 CHANGED TO A LESS CONTAMINATING TYPE SALTCH INITIATED.	98-04-083 GYRO-ROLL DISPLACEMENT	OPERATION-DURING SUB-SYSTEM TESTING ISE AND EXCESSIVE VIBRATION OF THE R	CORRECTIVE ACTION-VOAR TO VELEOR TO-1, ENSURE PURITY AND DEW POINT OF HELIUM IS WITHIN REQUIREMENTS. 2. INSTITUTE ULTANSONIC CLEANING OF PARTS W-EEE FEASIBLE. 3. USE FIXTURE DURING BEARING LAPPING CPERATION. 4. USE STORAGE DESSIGATED AND STATES SOLDERING AND WIRE STRIPPING. 6. ISOLATE PARATEMENT OF PERATIONS. ASSEMBLY UNITS IN POSITI WE PREES. ALE ALELS. 7. ELIMIMIE SALVERING OF HOUSINGS, USE COMENT INSTEAD. 6. PLATE PARTS SUSCEPTIBLE TO CORROSION I MSTEAD OF PAINTING.	98-04-093 DISPLACEMENT GYRO	FAILURE MODE-OUT OF TOLERANCE, DURING GYRO LAB CHECKOUT UNITS PITCH SLAVING SENSITIVITY VALVES WERE HOTED TO BE OUT OF TOLES INCE. FAILURE COLLD NOT BE CONTINNED AT S.D. TEST SET ERROR SUSPECTED. CORRECTION. NOWE, FAILURE COULD NOT BE CONTINNED.	98-04-091 VIRING-40V POMER	JHORT. DURING HISSILE CHECKOUT, PROGRAMMER INTERHITTENTLY HESET TO ZERO. FAILURE MAS DUE TO HOV FLED THROUGH ON THE HIGH POWER 4 BOAKD TO THE METAL FRAME, THERE WAS INADGRUATE CLEARAN	CORRECTI E ACTION-REDESIGH OF PROGRAMMER INPLEMENTED TO PROVIDE ADEQUATE CLEARANCE BETWEEN THE AGY FEED THROUGH AND THE METAL PRAME ASSEMBLY.	
*** ***	BYSTEH B B-SYSTEM	CORECTIVE ACTION-CEMENT HOLDING THERMOSTAT SEARCH FOR A MORE RELIABLE SWITCH INITIATED.	AUTOPILOT SQUARE-A/B	FAILURE MODE-ERRATIC OPERATION-DURING JECTED FOR AUDIBLE MOISE AND EXCESSIVE	CORRECTIVE ACTION- WCAR TO LIRASONIC CLEANING OF PAR ORBS. 3. SE HCOS DURING: WE PRESS ACT ARCAS. 7. ELLI HSTEAD OF PAINTING.	AUTOPILOT - SQUARE-A/B	FAILURE MODE-OUT OF TOLES OF TOLES OF TOLES INCE. FAILURE CO	AUTOPILOT - SQUARE-A/B	FAILURE MODE-ELECTRICAL : SMORT CHICUITIME OF THE . CE BETMEE! THE TWO.	CORRECTI E ACTION-REDEBIENTHE HETAL PRANE ASSENDLY.	

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

M3:874 M3:878 M3:674	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE FART NUMBER	VEHICLE BITE	PRI VENDOR NAME	
AUTOFILOT-SQUIRE-A/B	AECO-0363/FC-5CO-01-03 HARNESS	COMPOSITE-PACTORY	3£ 6004£7	YES NO	****
FAILURE MODE-FAIL TO ON A TAM TORQUIME NAS MOT I	FAILURE MOCE-FAIL TO OPERATE AT PRESCRIBED TIME, BECAUSE OF AN OPEN SIGHAL WIRE AT THE ARMA GUIDANCE DISCONNECT ARM A YAM TORQUING MAS MOT EVIDENCED ON THE AFTER STAGING.	P AN OPEN SIGNAL WIR	E AT THE ARMA GU	IDANCE DISCONNECT ARM	
STREET EFFECT-OPERATION	STSTEM EFFECT-OPERATION STOPS PREMATURELY. YAW TORBUING STOPPED AT STAGING	OPPED AT STAGING.			
CORRECTIVE ACTION-THE	SIGNAL WIRE HAS REPAIRED.				
AUTOFILOT-SAUARE-A/B GTRO PACKAGE	99-G4-D67 GYRO-DISPLACEMENT	FAR 27-41002-825	600426 ETR	22	697798
FAILURE MODE-OUT OF TOU COMPIRMED AS BEING IN GO	TOLERANCE-GYROS EXHIBITED HIGH DRIFT RATES IN THE PITCH AND YAW CHANNELS. FAILURE COULD NOT BE 1 GYRO. FAILURE ATTRIBUTED TO ELECTRICAL NOISE PICKUP ON THE TEST SET.	IATES IN THE PITCH AN	D YAW CHANNELS. E TEST SET.	FAILURE COULD NOT BE	
CORRECTIVE ACTION-TVA 1	IN 135UED TO CALL OUT ELECTRICAL GROUNDING NECESSARY TO REDUCE NOISE TO THE CANISTER.	IING NECESSARY TO RED	UCE NOISE TO THE	CANI STER.	
AUTOPILOT-SQUARE-A/B	98-04-062 CYRO-D1 SPLACENENT	FAR 27-41002-809	600 600407	YES NO	987798
FAILURE HODE-CUT OF TOLE AND THE TAW DISPLACENE ROS NERE CAUTPPED MITH 1	FAILURE MODE-OUT OF TOLERANCE-DURING TEST THE PITCH DISPLACEMENT GYRO RESPONSE WAS FOUND TO BE HIGH OUT OF TOLERANG E AND THE YAW DISPLACEMENT GYRO RESPONSE WAS FOUND TO BE LOW OUT OF TOLERANCE, GYROS WERE DRAWING EXCESS CURRENT. GY ROS WERE EQUIPPED WITH S PCT TRINMING RESISTORS	CEMENT GYRO RESPONSE NA OUT OF TOLERANCE.	MAS FOUND TO BE GYROS MERE DRAMI.	HIGH OUT OF TCLERANC WE EXCESS CURRENT, 67	
CORPECTIVE ACTION-VCAR RESISTERS ARE BEING SUB	CORPECTIVE ACTION-VEAR ISSUED TO VENDOR TO IMPROVE GUALITY CONTROL PROCEDURES. ONE PER CENT METALLIC FILM PRECISION RESISTERS ARE BEING SUPPLIED FOR GAIN TRINMING OF THE GYROS.	CONTROL PROCEDURES.	OHE PER CENT HE	TALLIC FILM PRECISION	
AUTOPILOT - SQUARE - A/B	98-04-033 Amplifiers/Transformers	FAR 27-41002-809	600400 ETA	YES 60/C	891350
FAILURE MODE-FAIL TO OF R AMPLIFIERS, TRANSFORME	FAILUGE MODE-FAIL TO OFEMATE AT PRESCRIBED TIME, DURING TEST THERE WAS NO OUTPUT RESPONSE FROM PITCH OR ROLL TORQUE R AMPLIFIERS, TRANSFORMERS FAILED LUE TO INADEQUATE RATINGS.	ST THERE WAS NO OUTP	UT RESPONSE FROM	PITCH OR ROLL TORGUE	-
CORRECTIVE ACTION-TORGU	CORRECTIVE ACTICM-TORGUEZ AMPLIFIER OUTPUT TRANSFORMERS REPLACID WITH COMPONENT THAT HAVE HIGHER CURRENT RATINES.	PLACED WETH COMPONEN	T THAT KAVE HIGH	ER CURRENT RATINGS.	
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	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TOFILOT SYSTEM-AIRBOR	ž			
3787EM 3460-3737EM	TESTAREMONT NUMBER FAILED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VENICLE AITE DATE DIF TIME DIF	PPI VENDOR NAME	3 -	
AUTOFILOT-SQUARE-A/B 67RO PACRAGE	88-04-106 67RO-013PLACEMENT/MEATER	FAR 87-41008-633	600323 ETR	7ES 60/C	***************************************	:
FAILURE MODE-CONTANINAT	MATION. COURSE HEATER THERMOSTAT OPEN CONTAMINATION SOURCE,	PHERHOSTAT OPEN DUE TO CONTANINATION ON CONTACTS. OUT-GASING OF	ON CONTACTS. OU	I-GASING OF POTTING	o ¥	
¥	VENDOR HAS CHANGED CENENT USET TO H	TO MOUNT THERMOSTAT TO REDUCE SUFGASING.	DUCE SUTGASING.		a a section of the se	
AUTOFILOT-SQUARE-A/B 67RO PACRACE	98-04-034 GYRO-DI3PLACEMENT/RESISTORS	FAR E7-41002-809	600211 ETR	YES 60/C	83218	=
FAILUKE MODE-OUT OF TOLI STS. TRINIMG RESISTORS TO	FOLERANCE. ROLL GYRO TORQUING SENSITIVITY OUT OF DPECIFICATION LIMITS DURING GYRO LABORATORY TE I TOLERANCE BANDS TOO WIDE.	VITY OUT OF DPECIFICA	TION LIMITS DURI	6 67RO LABORATOR	7 78	
CORRECTIVE ACTION-DESIGN 8 FOR GAIN TRIMMING.	CORFECTIVE ACTION-DESIGN CHANGED TO REQUIRE I PERCENT PRECISION RESISTORS IN PLACE OF	HSION HESISTORS IN P		S PER CENT PRECISION RESISTER	\$1E.9	
AUTOFILOT-SQUARE-A/B SYRO PACKAGE	98-04-039 67RO-TRANSFORMEN	FAR 27-41002-609	42D ETR 606119	YES	50000	ě
FAILURE HODE-ELECTRICAL OPEN. CKS TO DETERMINE CAUSE THE GYRY HASE TRANSFORMER.	IL OPEN. 6SC BATTERY ACTIVATE LIGHT WAS CH WHEN IT SHOULD HAVE BEEN OFF, FOLLOWING CIRCUIT CHE THE GTRO AND PROGRAMMER FAILED. THE GTRO HAD AN OPEN RATE GYRO FICKOFF AND A DANAGED SINGLE P	MS CH WHEN IT SHOULD GYRO HAD AN OPEN RATE	MAVE BEEN OFF. F.	FOLLOWING CIRCUIT CHE IND A DAMAGED SINGLE P	Ç ni	
CORRECTIVE ACTION-WOME-CAUSE	AUSE OF FAILURE COULD NOT BE DETERMINED. SYSTEMS CLOBELY WATCHED FOR RECURRENCE OF FAILURE.	MINED. SYSTEMS CLOSEL	Y MATCHED FOR RE	CURRENCE OF FAIL	ij	
AUTOFILOT-SQUARE-A/B	HG-88-04-3528F CIRCUIT BOARD-CONNECTOR	FAR 27-41002-697	CELLS SAN DIEG YES	r vEs	**	
FAILURE MODE-BTRUCTUMAL RMED. 17 IS POSSIBLE THAT	FAJLUME HODE-BTRUCTUMAL-A CHIPPED COMMECTOR WAS POUND ON THE PITCH BIGHAL ANMLIFIER (MODULE). THE FAILUME WAS CONTI MED. IT IE POBSIBLE THAT THE BIGHAL AMPLIFIER BOARD WAS HISHANDLED, CAUSING THE CONJECTOR TO BREAK.	HE FITCH BIGHAL AMELI BMANDLED, CAUSING THE	FIER (MODULE), T	HE PAILUNE WAS CO		
CORRECTIVE ACTION-USENOAL.	ř					

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IRBORNE	RCE VEHICLE SITE ORI VENDOR PART NO	TORY 128D FACTORY YES ABSEDS	FAILURE MODE-FAIL DURING OPERATION, ROLL GYRO BIAS AND TORQUING FUNCTIONS WERE LESS THAN EXPECTED. THE MEGATIVE ROL L GYRO BIASING FUNCTIONS AT 80 AND RES SECONDS WERE POSITIVE PHASE RATHER HAN NEGATIVE PHASE AS EXPECTED. ALSO, A R OLL GYRO BIAS FUNCTION WAS EVIDENT FROM 194 TO ROB SECONDS INSTEAD OF THE EXPECTED TORQUING PUNCTION. THIS COMDITION WAS CAUSED BY A FAULTY ROLL TORQUER ANNLIFIER MITHIN THE GYRO CANISTER.	6 REQUIRED.		FACTORY NO 895911	SPECIFICATION-GYRO PACKAGE REJECTED DUE TO BURNS ON COMMECTOR J-1 BETMEEN PINS AA, 66 AND FF. D TO HAVING GYRO MEATER POWER APPLIED WHEN COMMECTOR WAS DEMATED.	##_CTOR.	1790 WIR YES KEARFOIT BESSER.	OPERATION-GYRO CAN MAS REJECTED FOR STICTION 1.1 TAN DISPLACEMENT GYRO. GYRO MAS FOUND TO HAVE DISTORTED FLEX LEAD, AND CONTAMINATED FLUDROLUBE. EXACT CAUSE OF STICTION MAS NOT DETERMINED.	CN GYRO REDESIGNED.	FACTORY YES 6D/C 094E61	TOLERANCE. THE BHILD BURABBEHBLIES HERE REJECTED WHEN THEY WOULD NOT SUCCESSFULLY PASS THE FUNCT	
OPILOT SYSTEM-AI	DIF DATA SOURCE PART NUMBER	COMPOST TE-FACTORY	GUING FUNCTIONS E PHASE RATHER (INSTEAD OF THE E YRO CANIBIER.	OMPOSITE TESTING	PLACED.	FAR 27-41002-855	E TO BURNS ON CO	RE DEMATING COM	FAR 27-41002-899	TICTION TH YAN D	EIVING INSPECTIO	FAR 27-43186-3	REJECTED WHEN T	
DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER FAILED COMPONENT MANE	AN141-0-1-128/FC-4CO-01-128 AMPLEFIER	FAILURE MODE-FAIL DURING OPERATION, ROLL GYRO BIAS AND TORGUING FUNCTIONS L. GYRO BIASING FUNCTIONS AT 80 AND RES SECONDS WERE POSITIVE PHASE RATHER OLL GYRO BIAS FUNCTION WAS EVIDENT FRON 194 TO ROS SECONDS INSTEAD OF THE 1 WAS CAUSED BY A FAULTY ROLL TORGUER AMPLIFIER WITHIN THE GYRO CANIBIER.	BYSTEM EFFECT-INFROMER AMALOG SIGNALS. VEHICLE EFFECT-COMPOSITE RE-SCHEDULED. SYSTEMS LEVEL AND COMPOSITE TESTING REQUIRED.	CORRECTIVE ACTION-THE FAILTY ROLL TCRQUER AMPLIFIER WAS REPLACED.	A-99-04-3292F COAMECTOR	SPECIFICATION-GYRO PACKAGE REJECTED DUE TO BURNS ON CONNECTOR J TO HAVING GYRO HEATER POWER APPLIED WHEN CONNECTOR WAS DEMATED.	CORRECTIVE ACTION-PERSONNEL CAUTIONED TO REMOVE POWER BEFORE DEMATING CONNECTOR.	SP-9B-04-3291F GYRO, DISPLACEMENT	OPERATION-GYRO CAN MAS REJECTED FOR STICTION 1,4 YAW DISPLACEMENT DISTORTED FLEX LEAD, AND CONTAMINATED FLUOROLUBE, EXACT CAUSE OF	CORRECTIVE ACTION-NEW TESTS FOR STICTION INSTITUTED IN RECEIVING INSPECTION 6TRO REDESIGNED.	SLV-99-04-4791-F	CHANCE, THE SHEE SUBASSEMBLIES WERE	FAILURE NOT COMPIRMED.
*** 707 81	#757EM #UB-#737EM	AUTOFILOT - SQUARE - A/B STRO FACKACE	FAILURE MODE-FAIL DURING L GYRO BIASING FUNCTIONS OLL GYRO BIAS FUNCTION NA NAS CAUSED BY A FAULTY R	SYSTEM EFFECT-INFROMER ANALOG SIGNALS. VEHICLE EFFECT-COMPOSITE RE-SCHEDULED.	CORRECTIVE ACTION-THE FA	AUTOFILOT-SQUARE-A/B GYRO PACKAGE	FAILURE HODE-OIT OF SPEC AMICE WAS ATTRIBUTED TO H	CORRECTIVE ACTION-PERSON	AUTOPILOT-SQUARE-A/B	FAILURE MODG-ERRATIC OPE DIMPLED THRUST PLATE, DIS	CORRECTIVE ACTION-NEW TE	AUTOFILOT-BOLARE-A/B FYRO PACKAGE	FAILURE HODE-OUT OF TOLE TOWAL TEST.	CORRECTIVE ACTION-HOME-FAILURE NOT CONFIRMED.

CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

STSTEM SUB-STSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE PRI VENDOR NAME	
AUTOFILOT-SQUARE-A/B	A-88-04-3439-F SMO FILTER	FAR 27-41002-855	SYCAMORE YES GO/C NO	•
FAILURE HODE-OUT OF TOLERANCE, EXCESSIVE TIME CIRCUIT RESULTED FROM A DEFECTIVE SWRD FILTER.	ERANCE. EXCESSIVE TIME BETMEEN APPL Defective snad filter,	CATION OF GYRO A.C.	TOLERANCE. EXCESSIVE TIME BETWEEN APPLICATION OF GYRO A.C. AND THE GO-INDICATION FROM THE SMRD A DEFECTIVE SMRD FILTER.	
CORRECTIVE ACTION-THIS TYPE BLY AREA FOR INSTALLATION OF	TYPE FILTER NO LONGER USED IN PACKA N OF INPROVED FILTER.	E. IMPROVED FILTER M	CORRECTIVE ACTION-THIS TYPE FILTER NO LONGER USED IN PACKAGE. INPROVED FILTER NOW IN USE. PACKAGE RETURNED TO ASSEM LY AREA FOR INSTALLATION OF IMPROVED FILTER.	•
AUTOPILOT-SQUARE-A/B	A-99-04-4672C Transforer	FAR 27-04395-3	FACTORY YES THERHADGR NO 27-04395-3	691693
FAILURE MODE-STRUCTURAL.		PREVIOUS ANALYSIS SH	TRANSFORMER CORNERS WERE CRACKED. PREVIOUS ANALYSIS SHOWED THIS CAUSE OF FAILURE TO BE INS WITH OF THE POITING COMPOUND.	
CORRECTIVE ACTION-NOME.				
AUTOPILOT - SQUARE - A/B GTRO PACKAGE	A-99-c4-3162F 67ro-displacement.	FAR 7-04250-3	FACTORY YES KEARFOTT NO C70-2506-000	***************************************
FAILURE MODE-CONTANIMATI ATTON IN THE FLUOROLUBE D	INATION. TWO GYROS EXHIBITED STICTION DURING FUNCTIONAL TESTI UBE DAMPING PLUID WAS FOUND AND WAS THE CAUSE OR THE FAILURE.	AING FUNCTIONAL TEST CAUSE OR THE FAILURE	FAILURE MOE-CONTANIMATION. TWO GYROS EXHIBITED STICTION DURING FUNCTIONAL TESTING, FAILURE WAS CONFIRMED. CONTANIN TION IN THE FLUCROLURE DAMPING FLUID WAS FOUND AND MAS THE CAUSE OR THE FAILURE.	
CORRECTIVE ACTION-LINEMONN.	MM. VENDOR MOTIFIED OF THE RESULTS OF THE AMALYSIS.	OF THE ANALYSIS.		· · · · · · · · · · · · · · · · · · ·
AUTOFILOT - SAUNE - A/B GTRO PACKAJE	5#~60-04-3170F 67RO-5#RD	FAR 27-41703-809	11ED WTR YES	001230
FAILURE MODE-OUT OF TOLE CONFIRMED, THE FAILURE N	TOLERANCE. THE ROLL RATE GYRO HAD A LO URE WAS CLUSED BY A DEMAGNETIZED MAGNET R INADVERTENT MISAPPLICATION OF WOLTAGE	AD A LOM OUTPUT, 4.5 VOLTS PEAK MAGNET IN THE ROLL-RATE GYRO. WOLTAGE DURING TROUBLESHOOTING.	TOLERANCE. THE ROLL RATE GTRO HAD A LOH OUTPUT, 4.5 VOLTS PEAR 75.0V PEAK MINIMUM/. FAILURE WAS URE WAS CLUSED BY A DENAGHETIZED MAGNET IN THE ROLL-RATE GYRO. THE NAGHET WAS PROBABLY DENAGHETI A INADVERTENT MISAPPLICATION OF VOLTAGE DURING TROUBLESHOOTING.	
CORECTIVE ACTION-ALL PE	PERSONNEL MANDLING GYROS WERE CAUTIONED AGAINS CIRCUITRY WIA TWK 317-116 DATED JULY 26, 1962.	ED AGAINST MISAPPLIC. 26, 1962.	HANDLING GYROS WERE CAUTIONED AGAINST HISAPPLICATION OF VOLTAGES AND INPROPER TROUS VIA TWX 117-116 DATED JULY 26, 1962.	, ,
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	in pelantian displayed in deposits and the state of the s		PAGE 0472	·

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

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VENDOR MAME	APPLIED COMPON ENTS 1325	RELEASE ON CAS RELEASE ON CAS CLEAN ENCAPSULA	APPLIED COMPON ENTS 1329	E OR GREASE AND CLEAN ENCAPS	APPLIED COMPON ENTS 1, 13E5	ASE SEPARATED F LEASE OR CASE O	EAN ENCAPSULATI	YES CONVAIR NO EY-041E4-1	ES, AND 1.5 ADC	CYCLES, 3.0 AM	PAGE 0473
T X O	ž Š	ASS C HOLD	ž Š	R CAS	ž č	7 4 5 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5	RE CL	ž Š	CYCL ANGIN	\$400	l
VEHICLE SITE	5/09	E FIBERGL LY DUE TO RES TO IN)/03 e	SE SEPARA RELEASE O	5/05	E FIBERGL DUE TO HO	A TO EMBU	5/0 5 7	ESS OF CH	Y KIN A	
VEHICLE DATE DE	2/09 60-60-86	WO. 7. THE ON PROBABI PROCEDU	64-03-09 60/C	TO MOLD I	04-05-09 6D/C	77 ×8. TH	PROCEDURE:	44-04-EE 60/C	H AT 10	# 0.8 J#	
DIF DATA SOURCE PART HUMBER	UTP-PET 27-04166-1	AL SHOCK TEST, LOT NO, 7, THE FIBERGLASS CASE SEPARATED F SE OF CASE SEPARATION PROBABLY DUE TO MOLD RELEASE ON CAS DOR TO TIGHTENED &C. PROCEDURES TO INSURE CLEAN ENCAPSULA EF. CTCTH NO. 351-4-045	UTP-PET 27-04163-1	EN FAILED THERMAL SHOCK TEST, THE FIDERGLASS CASE SEPARATED FROM THE POTTING CAUSE OF CASE OR GREASE AND CAUSE OF CASE OR GREASE AND CAUSE OF CASE OR GREASE AND CAUSE OF CASE	UTF-FET 27-04166-1	AL BHCCK TEST FOR LOT #8. THE FIBERGLASS CASE SEPAR OF CASE SEPARATION PROBABLY DUE TO WOLD RELEASE OR	SENT TO VENDOR TO TIGHTEN 9C. PROCEDURES TO INSURE CLEAN ENCAPSULATI MAY 1966, REF. CTCTH NO. 551-4-046	UTP-PET P 27-04124-1	SPECIMEN WAS MEASUMED TO BE 3.9 MH AT 10 VAC. E400 CYCLES, AND 1.5 ADC. MOCEDURE IN ERROR SINCE SPEC. WIS IN PROCESS OF CHANGING.	ICE REQUIREMENTS TO	, semajaman, siyangi dapinda pinda pinda da sina pinda p
TEST/REPORT NUMBER FAILED COMPONENT NAME	69ASZ87.E CHUKE, FILTER	FAILURE MODE-STRUCTURAL-THE TEST SPECIMEN FAILED THE THERMAL SHOCK TEST, LOT NO. 7. THE FIBERGLASS CASE SEPARATED F ROM THE POTTING COMPOUND ON THE BOTTON OF THE SPECIMEN. CAUSE OF CASE SEPARATION PROBABLY DUE TO MOLD RELEASE ON CAS E OR GREASE AND DIRT FROM HANDLING. COKRECTIVE ACTION-LOT NO, 7 REJECTED, CAR 6154 SENT TO VENDOR TO TIGHTENED BC. PROCEDURES TO INSURE CLEAN ENCAPSULA TION CUPS. REPLY TO CORRECTIVE ACTION EXPECTED SI MAY 64. REF. CTCTH NO. 531-4-045	6945287.1 CHCKE, FILTER	FAILURE HODE-STRUCTURAL-THE TEST SPECIMEN FAILED THERMAL SMOCK TEST, THE FIDERGLASS CASE SEPARATED FROM THE POTTING COMPOUND ON THE BOTTON OF THE SPECIMEN, CAUSE OF CASE SEPARATION PROBABLY DUE TO MOLD RELEASE OR CASE OR GREASE AND DIRT FROM HANDLING. CORRECTIVE ACTION-LOT REJECTED (LOT NO. 6) CAR 6154 SENT TO VENDOR TO TIGHTEN 9C. PROCEDURES TO INSURE CLEAN ENCAPS	CGRECTIVE ACTION EX- PLOTED 31 MAY 1968. NEP. CICIT NO. 331-4-1044 6941260 CHOKE, FILTER 86-03-09	FAILURE HODE-STRUCTURAL-THE TEST SPECINEN FAILED THE THEMAL BHCKX TEST FOR LOT MB. THE FIBERGLASS CASE SEPARATED ON THE FOUNDLAND ON THE 10P OF THE SPECIMEN. CAUSE OF CASE SEPARATION PROBABLY DUE TO MOUR RELEASE OR CASE: GREASE AND DIRT FROM HYMULIKG.		62A5241 CHOKE-REACTOR, 30 WOLT, MOMER SUPP RT-041E4-1 LY	ERANCE- INDUCTANCE OF SPECIMEN WAS MEASUMED TO BE 3.9 MM AT 10 VAC, EADD CYCLES BE 3.0 MM MIN TEST PROCEDURE IN ERROR SINCE SPEC, WAS IN PROCESS OF CHANGING.	CORRECTIVE ACTION-SPECIFICATION CHANGE IN PROCESS, INDUCTANCE REQUIREHENTS TO BE 5.0 INT MIN AT 2400 CYCLES, 1.0 . D.C. TESTING REPEATED AND CONTINUED TO COMPLETION, REP. CTCTH HO. 5f1-4-043	
3731EX 806-3737EX	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	FAILURE MODE-STRUCTURAL-THE TEST S ROM THE POTTING COMPOUND ON THE BOT E OR GREASE AND DIRT FROM MANOLING. COKRECTIVE ACTION-LOT NO. 7 REJECT TION CUPS. REPLY TO CORRECTIVE ACTIO	AUTOPILOT-SQUARE-AZB	FALLURE HODE-STRUCTURAL COMPOUND ON THE BOTTOM DIRT FROM HANDLING. CORRECTIVE ACTION-LOT R	AUTOFILOT SHOWRE - AZE FILTER AND SERVOAM	FAILURE MODE-STRUCTURAL-THE TEST SPECTIVEN ROW THE POTTING COMPOUND ON THE TOP OF THE R GREASE AND DIRT FROM HINDLING.	CORRECTIVE ACTION-LOT NO. 8 REJECTED. CAR \$154 ON CUPS. REPLY 10 CORRECTIVE ACTION EMPECT. J 31	AUTOFILOT-BRUNKE-A/B	FAILURE MODE-OUT OF TOLENANCE- INDUCTANCE OF . THE INDUCTANCE BHOULD BE 3.0 HH MIN. TENT P	CORRECTIVE ACTION-SPECII	

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PRI VENDOR NAME OTH VENDOR PART NO	APPLIED COMPONENTS 1.	D ON THE BOTT	SENT TO VENDOR TO TIG	YES SPATRON NO TCS25145	IVE PRIMARY CO HAD DECREASED ESSIVE WIRE TO	ING PER NIL-W E ACCOMPLISHED	MAGNETIKA Serro	AMOUNT OF POTTING MATERIAL DUE TO BREAKDOMN IN RESIN I	THIS VENDORS NITIATION OF N JULY 1966 REF.	5/09	PITCH CHANNEL A 4 FOOT LONG
# 0 # T	# Q	DII (7 TA .	ž Š	XCE33	200	£ 6	F POT	3 2 2	£ 5	1 ER 1
VEHICLE SITE DATE DIF TIME DIF	3/0 3	STING CO	2 6154 SE	3/Q3	BY AN E	CCK WIRE	2/36	AMOUNT OF	RVEILLANGHES /	FACTORY	THE BOOS
VEHICLE DATE DIF	3/05 DE-E0-08	ROM THE PO	ESTED, CAF	66-03-04 GD/C	CONFIRMED RESISTANCIVE VIRE	70 1. CH	560520	PROBABLY	CURING SC	116039	ATTONS IN
DIF DATA SCURCE PART KUMBER	U79-PE7 87-04186-1	GLASS CASE SEPARATED FI	TED, NEW LOT MUST BE TI	E7-04164-1	OVERLOAD TEST, FAILURE THER TESTING SHOWED DC LUSED BY EITHER DEFECTI	6099 REQUESTING VENDON WHINE. LOT REJECTED 3	UTP-PET 27-04392-1	SHOCK TEST OF LOT NO.S. CONFERENCE WAS SOFT. CAUSE TERIAL WAS USED.	1948 REQUESTING IMMEDIA MIAING PROCEDURES AND ALT 88, CORRECTIVE ACT	FAR 68-41751-619	HIGH FREQUENCY OSCILLA HOMEVER THE FAILURE V
TEST/REPORT HUMBER FAILED COMPONENT NAME	ETC495E.1 CHOKE-FILTER	AL-FAILED THERMAL SHOCK TEST. FIBERGLASS CASE SEPARATED FROM THE POTTING COMPOUND ON THE BOTTO CASE SEPARATION WAS PROBABLY CAUSED BY MOLD RELEASE ON CASE OR GREASE AND DII I FROM HANDLING.	REPRESENTED BY TEST #2 TO BE REJECTED, NEW LOT MUST BE TESTED. CAR 6154 SENT TO VENDOR INSURE ENCAPSULATION CUPS. REPLY TO CAR EXPECTED 31 MAY 1966. REF' CTCTH MO. 551-4-041	etcabso. 1 Transformer	FAILURE MODE-SHURT (ELECTRICAL) - SPECIMEN FAILED DURING OVERLOAD TEST, FAILURE COMFIRMED BY AN EXCESSIVE PRIMARY CU Reent during induced voltage test folloming overload, further testing showed de resistance of minding had decreased Approximately equal to a chas during overload. This was caused by either defective wire coating or excessive wire te	CORRECTIVE ACTION-CORRECTIVE ACTION REQUEST WRITTEN, CAR 8099 REQUESTING VENDOR TO 1. CHECK WIRE CONTING PER MIL-W- 583 AND 2. CHECK WINDING MACHINGS FOR EXCESSIVE TEMSION ON WIRE. LOT REJECTED (LOT NO 710-38) PET TO BE ACCOMPLISHED ON NEW LOT REF CICIH NO. 551-1-040	6944933 TRANSFORMER, AUDIO FREGUENCY	FAILURE MODE-STRUCTURAL SPECIMEN CRACKED DURING THERMAL SHOCK TEST OF LOT NO.S. A SMALL AMOUNT OF POTTING MATERIAL WAS SEEPING OUT. AREA ARCIAD CRACK MAS SOFT, ENTIRE TRANSFOLMER WAS SOFT, CAUSE PROBABLY DUE TO BREAKDOMN IN RESIN H AMOLING PROCEDURES SO TAAT OVERAGE OR IMPROPERLY HIKED MATERIAL WAS USED.	CCRRECTIVE ACTION-AND TO G. KMAUSS, DEPT. 143-3, @ JUNE 1908 REQUESTING IMMEDIATE OP! SERVEILLANCE OF THIS VENDORS. Resim mandling procedures storage, compou of shelf life, mixing procedures and curing schedules and initiation of m Ecessart commective action. Op! findings expected by 10 junt 00, corrective action if hecessart by 30 junt 1900 ref. CTCM number 351-4-047.	BLV-99-04-3127 Beavorifier Absembly	PAILURE MODE-ERRATIC CPERATION-ARREMOLY MAS REJECTED FOR HIGH FREQUENCY OSCILLATIONS IN THE BOOSTER 1 PITCH CHANNEL, PAILURE AMALYSIS COULD NOT CONFIRM THE REPORTED FAILURE, HOWEVER THE FAILURE MAS DUPLICATED BY USING A 4 FOOT LONG
BYBIEN BLG-BYBIEN	AUTOFILOT-SQUARE-A/B	FAILURE MOE-STRUCTURAL-	CORRECTIVE ACTION-LOT RE	AUTOFILOT-SQUAXE-A/B PLCU FILTER AND SERVOANF	FAILURE MOE-SHORT TELEC REENT DURING INDUCED VOLT APPECATIANTELY EGUAL TO 0 NSION.	CORRECTIVE ACTION-CORRECTIVE ACTIONS AND 2. CHECK WINDING MACHINES FOR MEM LOT REF CICIT NO. 551-4-040	AUTURILOT - SQUARE - A/D FILTER AND RERVOAMP	FAILURE MODE-STRUKTURAL MAS SEEPING OUT, AREA ARC AMDLING PROCEDURES SO THA	CCRECTIVE ACTION-AND TO 6 RESIN HANDLING PROCEDURES 8 ECESSART CORRECTIVE ACTION. CTCH NUMBER 551-4-047.	AUTOFILOT-BOUARE-A/B	PAILURE MODE-ERRATIC OPEI

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BYSTEN BUB-SYSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	NIF DATA BOURCE PART HUNBER	VEHICLE SITE PRI VEHDOR NAME DATE DIF T.ME DIF OTH VEHDOR PART NO	VEHBOR MANE ENDOR PART NO	
TEST CABLE. IT MAS CONCL. E LONG INTERCOMECTING TE	COMCLUDED FAILUME COULD OCCUR IN THE TOP ASSEMBLY DUE TO AN ACCUMULATION OF TOLERANCES AND TO THE TEST CABLES.	ASSEMBLY DUE TO AN	ACCUMULATION OF TOLERANCES		400474
CORRECTIVE ACTION-NO COR	CORRECTIVE ACTION-NO CORRECTIVE ACTION CAN BE TAKEN AS THE EXACT CAUSE OF THE FAILURE HADICATION WAS NOT FOUND.	EXACT CAUSE OF THE	PAILURE INDICATION WAS NOT P	Found.	
AUTCPILOT-SQUARE-A/B	CT-93-D4-264 SERVOCYLINDER ASSEMBLY, SUSTAINER	FAR 27-63314-919	2900 ETR YES 60/C 860502 NO		880423
FAILURY MOSE-ERRATIC OPE ACE. REPORTED FAILURE WAS	OPERATION CAUSED BY SUPERIMPOSED HIGHER THAN NORMAL OSCILLATIONS ON THE UNITS NORMAL 10 CPS TRIMES NOT VERIFIED.	R THAN N'YRMAL OSCIL	LATIONS ON THE UNITS NORMAL	10 CPS TR	
CORRECTIVE ACTION-FIELD	CORRECTIVE ACTION-FIELD PERSONNEL WERE INSTRUCTED NOT TO USE 10 TO 12 CPS REJECTION CRITTRIA.	E 10 TO 12 CPS REJE	CTION CRITTRIA.		
AUTOPILOT-SQUARE-A/B	SLV-99-04-5104 Pur Siply and Low Pass Filter-Arai 69-41780-813	FAR 69-41700-013	660406 FACTORY YES 6U/C		8 004 8
FAILURE MODE-FAIL TO OPEF 19 DC OUTPUT, FURKTIONAL ' 19-9 VDC. OUTPUTS FYR THE E INSTALLED BACKWARD.	FAILURE MODE-FAIL TO OPERATE. THE POWER SUPPLY AND LOW MASS FILTER NETWORK WAS REJECTED FOR LACK OF PLUS OR MIMUS Z 19 DC OUTPUT, FUNKTIONAL TESTING OF THE SUPPLY BY FAILURE ANALYSIS REVEALED NO CUIPUTS FOR (+) 20.6 VOLT DC AND (+) 19.9 VDC. OUTPUTS FOR THE PLUS OR MINUS ELS WOLT DC NENE MORMAL FAILURE WAS TRACED TO DICDOS CR-15 AND 16 MHICH MER E INSTALLID BACKWARD.	FILTER NETWORK MAS NLYSIS REVEALED NO HMAL FAILURE MAS TR	REJECTED FOR LACK OF PLUS C CUTPUTS FOR (+) 20.6 VOLT DC ACED TO DINDES CR-15 AND 16	OR MINUS 2 C AND (+) WHICH WER	
CCRECTIVE ACTION-PHOLOYI 15ED TO ASSURE THE POWER S TIME OF DISCREMANCY MILL	CORRECTIVE ACTION—FINELOYDE RESPONSIBLE WAS INSTRUCTED IN HOW TO CORRECTLY ASSENBLE THE NETWORK. EOP 35J.673 WAS REV SED TO ASSINE THE POWER SWAYLY AND FILLED RETWORK IS TESTED ACCORDING TO BOTH SECTIONS OF THE EOP THIS ASSUNES THIS TYPE OF DISCREPANCY MILL, BE DETECTED BEFORE POTTING.	J TO CORRECTLY ASSE ACCORDING TO BOTH	HBLE THE NETWORK. EOP 35J.67 SECTIONS OF THE EOP THIS ASS	TS MAS REV SURCS THIS	
AUTCHILOT-BAUKEC-A/8 FILTER AND SFRYGAMP	SLV-99-04-5100 FILTER CIRCUIT BOARD	FAR 69-41711-5	5001 FACTORY YES GO/C 66.3529 NO		904060
FAILURE HODE-OUT OF SPECIFICATION. TO OLTS OC HAD BEEN APPLIED TO THE INPUT ION OF EA-VOLTS DC TO ITS INPUT LINE.	FAILURE HODE-OUT OF SPECIFICATION, THE MOD-DEMODULATON FILTER CIRCUIT DOWND WAS REJECTED WHEN IT WAS SUSPECTED ES V OLTS OC HAD BEEM APPLIED TO THE INPUT SIGNAL LINE, ANALYBIS SMONED THE CIRCUIT BOARD HAS NOT DAMAGED BY THE APPLICATION OF 29-VOLTS DO TO ITS INPUT LINE.	EP CIRCUIT DOWND WAS	S REJECTED WHEN IT WAS SUSPE BOARD MAS NOT DAMAGED BY THE	E APPLICAT	
CORRECTIVE ACTION-NO CORP	CORRECTIVE ACTION-NO CORRECTIVE ACTION WILL BE TAKEN SECAUSE THIS CIRCUIT BOARD DID NOT FAIL.	THIS CIRCUIT BOAR	D DID NOT PAIL.		
	uchyen a menyhentakiny a meleket depaidaga glirengambulumbalumpeliletin returbusuk tup ketebeng	een salajo dapilajo dapallingaja papaja ji dasampapaga sataasaks	en der istenskriver engelege spiranter giv. Problemen mystelbourne in internetional spiranter of the spiranter	PAUE DATS	

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

SYSTEM 8UG-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DATE DATE DATE	PRI VENDOR NAME	
AUTOPILOT-SQUARE-A/B	SLY-09-04-5101 SIGNAL AMPLIFIER CIRCUIT BOARD	FAR 60-41911-803	5001 FACTORY 660329	YES 60/C NO.	690491
FAILURE MODE-OUT OF SPECIFICATION. C HAD BEEN APPLIED TO THE OUTPUT SI	PECIFICATION. THIS SIGNAL AMPLIFIER CIRCUIT BOARD WAS REJECTED WHEN THE QUIPUT SIGNAL LINE, AMALYSIS SHOWED THE CIRCUIT WAS NOT DAMAGED.	INCUIT BOARD WAS REED THE CIRCUIT WAS	JECTED WHEN IT WAS NOT DAMAGED.	WAS REJECTED WHEN IT WAS SUSPECTED ES-VOLT DIT WAS NOT DAMAGED.	
CORRECTIVE ACTION-NO	CORRECTIVE ACTION-NO CORRECTIVE ACTION WILL BE TAKEN BECAUSE THIS CIRCUIT BOARD DID NOT FAIL.	SE THIS CIRCUIT BOA	ND DID NOT FAIL.		
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAM	CT-98-04-267 COMMECTOR: ELECTRICAL	FAR	66 050 2	YES BENDIX NO PT06P-12-39/50 3	890473
FAILURE MODE-ELECTRICAL OPEN CAUSED	FAILURE MODE-ELECTRICAL OPEN CAUSED BY DISPLACED CONNECTOR CLIP SPRING.	CLIP SPRING.	LERT GO/C RECEIVI	HE INSPECTION OF THE	
PROBLEM.					
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	574-3-66-35	P.1647	73D ABRES6-1 660219	-1 YES NO	89030
FAILURE HODE-PROPELLANT SLOSH RA'	FAILURE HODE-PROPELLANT SLOSH RATES DURING BOOSTER PHASE WERE HIGHER THAN NOTHAL-REACHING 16.6 DEG PER SEC IN ROLL- 8.5 deg per sec in pitch and 3.7 deg per sec in yam.	JERE HIGHER THAN NO	INAL-REACHING 16.6	DEG PER SEC IN ROLL-	
STSTEM EFFECT-ERRATIC OFFRATION ALTIBLY EXCEED THE LIMITS OF STABILITY.	STSTEN EFFECT-ERRATIC OPERATION ALTHOUGH VEHICLE STABILITY WAS MAINTAINED, SLOSH RATES OF THIS MAGNITUDE COULD BLY EXCEED THE LIMITS OF STABILITY.	Y WAS MAINTAINED, SI	LOSH RATES OF THIS	MAGNITUDE COULD POSS	
VEHICLE EFFECT-NONE.					
CORRECTIVE ACTION-NONE.	Ē.			***************************************	
AUTOPILOT-SQUARE-A/B FILTER AND SERYOAMP	A-81)-04-5102 Bervanplifier	7AR 27-44535-5	5050 WTR 660217	YES 60/C NO	080490
FAILURZ MODE-ERRATIC ONERATION. S AXIS STOP, RETESTING DID NOT RESUL	FAILURZ MODE-ERRATIC CHERATIOM. BERVOAMPLIFIER WAS REJECTED WHEN THE BOOSTER 2 ENGING STEPPED OUT TOWARD THE PITCH IXIS STOP. RETESTIMG DID MOT RESULT IN A REPETITION OF THE PROBLEM. FAILIRE ANALYSIS DID NOT FIND ANY FAILURE.	ED WHEN THE BOOSTER PROBLEM, FAILIME A	Z ENGINZ STEPPED NALYSIS DID NOT F	OUT TOMARD THE PITCH IND ANY FAILURE.	
CORPECTIVE ACTION-NO CORRECTIVE	CORRECTIVE ACTION TAKEN AS THE FAILURE REPORTED WAS NOT CONFIRMED AND NO CAUSE FOR THE FAILURE	ME REPORTED WAS HOT	CONFIRMED AND NO	CAUSE FOR THE FAILUR	<u> </u>
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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I VENDOR HANE	YES 50/C	ILURE ANALTS	EF ECP 7777.	S. C.	LURE MAS ATTRICARD CONDUCT	TAPE SHSTALLA	7ES 40/C NO	VIA TELEMETRI ERVO ANP PAIL	And the second s	YES 66/C NO	AND NO MINUS	EY 363TRUCTIONS 1 196 ALL AUTOFILOT	BA C.F.
SITE PRI TIME DIF OTH	FACTORY YE	AND DRIFTIN	IN STOCK. R	CH CHILD	LS. THE FAIL	INSULATION	FACTORY YES	C CHECKOUT O		FACTORY YE	INTEGRATION	OMENTER BURN 1, RECONMEND	
VEHICLE DATE DIF	*120*1	F TOLERANCE MEALED ITSEL	MAND THOSE	5001 660126	(-) E1.3 VO	ENENTS FOR	\$402 : \$	AB LALBUE TI		103150	OF LOW PLUS	HOT FOUND. H	
DIF DATA SOURCE	FAR 89-41742-801	CTED BUE TO OUT OF	F THE TRANSISTOR NE	FAR 69-42000-825	N MAS CRSCANTO IN TOR CASES TO THE	DEFINE THE REQUIR	FAR 55-41000-627	S PEPORTED MARD C	-	748 78-42000-6	M WAS REJECTED FO	COF PAILURE WAS P	
TEST/REPORT HUMBER FAILED COMPONENT NAME	SLV-98-04-511E TAW-FILTER INTEGRATOR-TRANSISTOR	FAILURE MOCE-INTERMITTANT OPCRATION-THE INTEGRATOR WAS REJECTED DUE TO OUT OF TOLERANCE AND DRIFTING MICRO-AMMETER CURRENT READING. FAILURE MAS TRACED TO AN INTERNITANT TRANSISTOR 6-1 WHICH HEALED ITSELF DURING FAILURE ANALYSIS-INUGHES HATSSA) DATE CODED EIR (SIXTEENTH MEEK OF 1988)	CORRECTIVE ACTION-NO CORRECTIVE ACTION AS THE EXACT CAUSE OF THE TRANSISTOR FAILURE WAS NOT FOUND. RECEIVING AND INCOCHING 100 PERCENT TESTING OF ALL HUGHES HATSSA TRANSISTOR NEW AND THOSE IN STOCK, REF. ECP. 7777.	ALY-96-04-9050 SERVANPLIFICA, CIRCUIT BOARD, CAP 69-42000-828 ACITOR	FAILURE MOE ERRATIC OPERATION, INTERMITTANT TAW INTEGRATION WAS OBSERVED IN ALL CHANNELS. THE FAILURE WAS ATTRIBUTED TO AN INTERMITTANT SHOWST CIRCUIT SCARD CONDUCTING LAND. SUCH FAILURE IS DUE TO INSULATION TAME DEGRADATION.	CORRECTIVE ACTION-MAMMEACTURING SPEC 25.356 WAS REVISED TO DEFINE THE REQUIREMENTS FOR INSULATION TAPE INSTALLATION ALSO SPEC. 0-79015 WAS REVISED TO INSURE CORRECT INSULATION IS APPLIED.	CT-AB-04-241 SCHVOAHMLIFIER, AZP	FAILURE MOE-CHRATIC OPFRAIICM, MOUNTEN E PITCH ACTUATON WAS PERONIED HAND CMTR IN FINAL CHECKOUT WIR TELEMETRY DAT 1. THIS OCCURRENCE WAS NOT VISUALLY CONFIRMED AT THE SITE, FAILURE ANALYSIS WAS UNABLE TO CONFIRM SERVO ANP FAILURE	FAILURE WAS NOT CONTINUED.	SLY-AP. 04-5092 CIRCULT BOARD, INSULATION	FAILUME HODE-OUT OF TOLEGANCE. SERVOANMLIFIER YAM INTEGRATOR WAS REJECTED FOR LOW PLUS INTEGRATION AND MO MINUS INT GRATION. FAILUME COULD HOT BE COMFIRMED HOMEVER THE ELECTRICAL PAPER TAPE COVERING THE 1-) RI VOLT COMDUCTING LAND US DEGRADED WITH THE CELLULOME FIBER EXPOSED.	CORECTIVE ACTION-WO CORRECTIVE ACTION TAKEN AS EXACT CAUSE OF PAILURE WAS HOT FOUND. HOWELER SURVEY INSTRUCTIONS E-as and 18-46 WERE ISSUED TO HELF RESOLVE THE ELECTRICAL PAPER TAPL DESTADATION PROBLEM, RECOMMENDING ALL AUTORILE	
3737EH 308-3737EH	AUTOFILOT- VAUARE-A/B	FAILURE MODE-INTERMITTAI CURRENT READING. FAILURI INUGHES HATSSA! DATÉ CODE	CCERECTIVE ACTION-NO COL	AUTOFILOT - SAULEE - AVE FILTER AND SERVORME	FAILURE MORE EMBATIC OF ED TO AN INTERMITANT SACANO. SACH FAILURE IS DA	CORRECTIVE ACTION-MANUF.	AUTOFILOT-SQUAFE-A/B	PAILURE MOE-ERRATIC OM A. THIB OCCURRENCE WAS IN	COBRECTIVE ACTION-NOME	AUTOFILOT - SAUAVE - A/B FILTER AND SCRWOUM	FAILURE MODE-OUT OF TOLERANCE, SERVOANPLIFIER EGRATION, FAILURE COULD HOT BE COMFIRMED HONEY MAB DEGRADED WITH THE CELLULORE FIBER EXPOSED.	COMPECTIVE ACTION-NO CO. 3-66 AND 13-66 MERE 1850	

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GENERAL DYNAMICS CONVAIR DIVISION

13 JUN 1864

CANISTERS BE RETURNED TO CONVAIR FOR RENORR AUTORILOT-SAUKEE-A/B FILTER AND SERVOANT FILTER AND SERVOANT FAILURE MODE-OUT OF SPECIFICATION, IT WAS R ER 1 YAM SIGNAL BY 0.6 SECOND OURING THE AUT E INITIAL PROBLEM.	A-80-04-5011-F SERVOAMPLIFIER SERVOAMPLIFIER E7-44535-3 SERVOAMPLIFIER SERVOAMPLIFIER SERVOAMPLIFIER SERVOAMPLIFIER BOOSTER E TAM SIGNAL ON A SANBURN RECORDING LAGGED THE BOOST SECOND DURING THE AUTO- PILOT LOOP TEST, SANSCHNIS BENNAS OF THE 7EST FAILED TO DUPLICATE TH			-			
* .	1011-F LIFTER LITER REPORTED THE BOOM THE AUTO- PILOT LOOP 1						****
	I. IT MAS REPORTED THE BOX	カーのののママール 製	121159	£ 5.5	YES NO		1001
		ECIFICATION. IT WAS REPORTED THE BOOSTER R TAW SIGNAL ON A SANGURN RECORDING LAGGED THE BOOST SECOND DURING THE AUTO- PILOT LOOP TEST, SUBSEQUENT RENUMS OF THE TEST FAILED TO DUPLICATE TH	A SANBORN IS OF THE	RECORDI	46 LAGGED 1	HE 600ST	
CORFECTIVE ACTION-WOME, FAILURE N	FAILURE NOT CONTEMED.						
AUTOFILOT-STUARE-A/B SLY-98-04-5087 FILTER AND JERVOAMP YAM INTEGRATOR	9LV-58-04-5087-6	FAR 68-42300-5	\$001	E18	YES CONVAIR	, as	890578
FAILURE HIDE-ERRATIC OPERATION, TAW INTEGRATOR PRODLEN RESULTED IN ADMORMAL BOOSTER ENGINES TAW MOVEMENT DURING GYR O TOGAUE TEST POSTION OF FACT, SEFOND PROBLEM OCCURRED DURING PLUS COMMITATIES SECONDS WHEN TAW INTEGRATOR FAILED F OR SHANT TIME, THIS FAILURE MAS PARTIALLY WESFIED DURING FAILURE AMALYSIS WICH THE TAM D-C AMPLIFIER SIGNAL, IN SAT URATED CHADITION AND WITH INTEGRATIN ACTIVE, INTERNITTENTLY DROPPED OUT FOR 2 MINUTES, EXACT CAUSE OF DROPOUT HOT DE TERMIND.	AH INTEGRATOR PROBLEM RES OND PROBLEM OCCURRED DURING PASIALLY VERIFIED DURING POPE ACTIVE, INTERMITTENTLY	ULTED IN 4BNORMAL BOX MG PLUS COMIT AT 123 AILURE AMALTSIS MACH DROPPED OUT FOR Z HI	SECONDS W THE YAM D MUTES. EX	AES TAN PEN TAN POT CAUS	YOVEMENT DU INTEGRATOR TIER 31 GHAL E OF BROPOL	RING GYR FAILED F I IN SAT	
MCAC.	CAUSE OF PATLUPE NOT DETERMINED.						····
AUTOFICOT-SAMMENAND BE-ANC-01-ES	£ 2 - 1	COMPOST TE-PPS/DPL	#30 #3635#	# L	ž č		69C32R
FATLURE MOCE-SOIFT, LANGLING INSTRUMENTATION TITCH DURING THE UNIT DATA THOUGHTED RUN THE LAST CHECKOUT LOOP TEST AND THE DRILL.		INDICATED A MALL SWIFT OF APPROXIMATELY 1 TO 1.5 DEG ON VERHIER WO & A D.FFERENCE OF APPROXIMATELY + 4.5 DEG IN THE VERHIER NO E POSITION	ATELY 1 T	0 1.5 DE:	CA VERHIE	R #0 # #	
SYSTEM EFFECT-MONE.							
MENICUE EFFECT-NOME.							
COMPECTIVE ACTION PRICE TO FLIGHT	TO FLIGHT THE MULL SHIPT MAS CORRECTED.	c*(0.					····
AUTOFILOT-SQUARE-AZE SLV-99-02-5041F	#.V-99-04-5041F FRANSIBION 2M5.84	FA# 69-41000-8	610069	FACTORY	YES RAYTHEON	8	,

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13 JUN 1988

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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317E 71ME 01	ENOVE RA	3/ 9 3	SUSTAINE SE CURRE DO-5, 3/	EPLACE W	5/8	IBHATION	ECP 350	FACTORY	SCOUTT P SECULD. 1VOLTS. 1VC B-N TAC ZEN TAC ZEN TAC ZEN TAC ZEN
VEHICLE SITE PRE VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	NTB OCCURR 75-85 TO R	650913	110N, THE	TORS AND R	450831	AXIS R/S V	CY MODULE.	98083Q	CRE (EOP)33 AN WERE CB D 100 NJUL COMPONENT TA TRANSIS EVEL TO EOM TA BEFORE T
DIF DATA SOURCE PART NUMBER	CONTANTING		TUDE-VIBHA IVE TRAHSI TEST SPECI	AA TRANSIS	B-8	ICATION Y-	POLER SUPP	109-1	TON PROCED PEAN TO PE TO EXCLE DEFECTIVE THE NOTE TO COMPONEN TO C
DIF OA	ANENT OF	78-472	TURE-ALTI	CON ENDE	UTP-PAT 69-81000-3	AT VENTE TIME I OF	א פר אח	FAR 69-41791-601	T OFERTY TUDES HOT TUDES HOT THEE SHS SHOR TEYLPSE CO TENEDUCED TO THEE
FEST/NEPONT NUMBER PAILED COLPONENT NAME	IE OF THE GLASS HEADER AND THE ENTRAPHENT OF CONTANTMANTS OCCURRED DURING THE INITIAL MANUFA IS SLV-99-04-8083, CONVAIR ISSUED BURNEY IMSTRUCTIONS 75-85 TO REMOVE RAYTHEON 2M328A TIPE THE WITH SPERRY VEIGLD BUSSES TRANSISTORS.	8952898-1 AMPLIFIER, TRANSISTOR-ENGRED	OPERATION. DURING K-AKIS TEM-ERATURE-ALTITUDE-VIBHATION, THE SUSTAINER YAW SERVOAMPLIFIER APPROXIMAIELY 30 CPS OF VIBRATION. EXCESSIVE TRANSINIOR LEARAGE CURRENT CAUSED BY SEAL FR A RYGZÓH CAUSING NOISTURE CONTANINATION. TEST SPECINEN 69-41000-5, 3/N 306-008	INSTRUCTIONS 75-45 TO REMOVE RATTHEON ENGRBA TRANSISTORS AND REPLACE WITH SPERKY PARIS. EC ED AS A FINAL CORRECTIVE ACTION.	rsfagg Transforer	FAILURC HODE- FAIL CARING GECHATION, DURING 15TH CYCLE OF PAT VEHIFICATION Y-AXIS R/S VIBHATION. THE PLUS AND MINUS En noc romer supply failed duc to a dromen wire at The Terminal & OF Transformen te on Power supply board aban (E7- 41783-3). Test specimin 336-coor, reper to Failure Log 951-3-011.	11 IS IN MOPK TO ACCOMPLISH REDESIGN OF AN POWER SUPPLY MODULE. ECP 3504 IS BEING INCOMPONA	34.V-88-U4-3063P 18AK\$1310R/U10DE	FAILUY MODE-OUT OF TOLEBAKE. THE ABSEMBLY FAILED EQUIPMENT OPERATION PROCEDURE (EOP) \$30.277 PARAGRAPH 4.1.2 DUE TO LIKES MODE. AND ONCILVATIONS. MODE TO LIKE TO PEAK WENE CASERVED. SPECIFICATIONS LIMIT CACLLATIONS TO LESS THIN ONCIRVATION OF OLE WITH APPLITUDES NOT TO EXCLED 100 MILLIPOLTS. THE REPORTED PAILUNE WAS MODE CAUSE THE CHECKLY BOARD ON MADE TO COMPINE TRANSISTORS AND CHECKLY BOARDS. AND A ZELEM DIOCE CAPE (INVESS) ISANDISTOR AND THE COMPONENTS. TRANSISTORS AND CHECKLY BOARDS. AND A ZELEM DIOCE CAPE EXHIBITED HIGH REVENE CHARGE DELOW THE ZENER VOLTAGE. PERLACEN EXTINCT HIGH NOTIFE. THE ZENER DIOCE CAPE EXHIBITED HIGH REVENE CHARGE DELOW THE ZENER VOLTAGE. PERLACEN EXTINCT HIGH MODING OUTPUT EXISTED. A PROCEDUMAL BARON DAMAGED THE COMPONENTS BEFORE THE ASSEMBLY WAS REJECTED FOR RAILINE AMALYSIS.
BYSTEN SUM-STRICK	ONCLUDED THAT THE FRACTURE CTUKING CTCLE. CORRECTIVE ACTION-PER RAR RANJESTORS AND REPLACE THER	AUTOFILOT-SAUANE-A/B	FAILURE MODE- FAIL DURING OUTPUT DRUPPED TO ZERO AT ACTURE AT THE BASE LEAD OF	CORRECTIVE ACTION-SURVEY P 3304 WILL BE INCORPORATES	AUTOPILOT-SQUARE-478 FILTER AND SCRUCANF	FAILURC MODE" FAIL GARING E1 NDC MOMEN SUMMEY FAILE! 41783-31, TEST SPECIMON SO	CORRECTIVE ACTION-ECP PRINT	AUTCHILOT - SUJEEC - AZB FILTER AND SERVOAM	FAILUT MODE-OUT OF TOLERA O LICESSIVE MOISE AND ONCE CACTLEATIONS TO LESS THIN WAY AND CONTRICE BECAUSE TANTSSAN AND A ZENER DIG CALECTOR-TO-ENTIFER, THE ENT OF THESE COMPONENTS REI ENTO THAT HIGH MOISE OUTPUT R FAILURE ANALYSES.

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SCHERAL DYNAHICE CONVAIR DIVISION

NATER BLG-SYSTER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE	VEHICLE DATE DIF	817E	1 2 0	VEHICLE BITE PRI VENDOR NAME DATE BIF TIME BIF OTH VENDOR PART NO	
CORRECTIVE ACTION-RAIN 77 WITH SPECIFIC INSTRU- BEGUENCY CACILLATION 30	CORRECTIVE ACTION-RAR BLY-99-04-6047 MAS 18SUED RECOMMENDING THAT THE DESIGN GROUP INITIATE A REVISION TO EOP 330-2 77 WITH SPECIFIC INSTRUCTIONS CONCERNING WHAT TO DO IN REMORKING A BERYCANPLIFIER ASSEMBLY WITH HIGH NOISE OR HIGH P REQUENCY CSCILLATION PROBLEMS.	ING THAT THE DESIGN ORKING A SERVOAMPLIFT	ROUP INITI	TE A PEC	5 3	TO EOP 330.2 18E OR HIGH F	*******
	SLV-#9-04-3043-F	FAR 69-41751-601	680430	PACTOMY	768 60/0	3/0	*****
FAILURE MODE-OUT OF TO 181VE MOISC AND OSCILLA NO MAU THREE DEFECTIVE NO MAU TREECTED FOR FAILU	FAILURE MODE-OUT OF TOLEPANCE. IT WAS REMORTED THIS SERVO ANFLIFIER FAILED EOP 33G.E?? PARAGRAPH 4.1.E. DUE TO EXCE SSIVE MOISC AND OSCILLATIONS. MOISE SIGNALS OF 15G MILLIVOLTS PEAK TO PEAK MERE COSERVED. THE CIRCUIT BOARD AS RECEI WED HAU THELE DEFECTIVE COMPOSENTS, REPLACEMENT OF THESE COMPONENTS RESTORED MORHAL OPERATION AND ALSO REDUCED THE N OISE LEVEL TO EOP SPECIFICATIONS. IT IS BELIEVED A PROCEDURAL ERROR DAMAGED THE THERE COMPONENTS BEFORE THE ASSEMBLY MAY REJECTED FOR FAILURE AMALYSIS.	ANFLETER FAILED EON LTS PEAK TO PEAK WERN OMPOMENTS RESTORED TH RAL ERROR DAMAGED THE	1330.277 P. COSERVED. MALL OPERA. E THEE COM	RAGRAPH	4.1.2 02.1 & 02.1 & 0.0 & 0.0 &	. DUE TO EXCE GARD AS RECEI REDUCED THE N THE ASSEMBLY	
CORRECTIVE ACTION-NOME.	. CAUSE OF FAILURE NOT CONFIRMED.						
AUTOFILOT-SQUARE-AZB	60/CA\$U63-001-44/FC-CC-01-0071-015 COMPOSITE-FACTORY 67RO - D13FLACEMENT	AS COMPOSITE-PACTORY	7113 650817		ž õ		•
FAILURE MOE-OUT OF TOLERANCE. RO SIGNAL AWILIFIER SATURATION.	TOLERANCE. ROLL PROGRAM DURATION (13 SECONDS) COALD NOT DE NEASUNED DUE TO ROLL DISPLACEMENT SY ATURATION.	SECONDS) COULD NOT BY	E NEASURED	DUE TO RO	ור סו	SPLACEMENT GY	<u></u>
STATEM EFFECT-INFROMER ANALOG SIGNALS.	ANALOG STGNALS.						
REMICLE EFFECT-COMPOSI	WENICLE EFFECT-COMPOSITE RE-SCHEDLED. POST - COMPOSITE TESTING RESULPED.	ESTING REGUIPED.					·····
CRRECTIVE ACTION-COMP	CORRECTIVE ACTION-COMPOSITE PREPARATION PROCEDURE WAS REVISED TO SET FOLL	13ED TO SET KOLL PRO	PROGRAMMER TO D.4 VAC.	0.4 VAC.			
AUTOPILOT-SQUANE-AZB FILTER AND SERNOAMP	69FZ696-1 AMPLIFICM, TRANSISTOR	UTP-PAT	650610	3/9s	£ 0	YES ENJESA MO	93169
FAILURE MOE-OUT OF TO GAIN NAS 0.140 WOLT /V MENT FROM BE EMBERA PIT 00.	FAILURE MODE-OUT OF TOLERANCE. DURING INITIAL PROOF CYCLE FOR PAT VERIFICATION ON THE SERVO AMP, THE PJTCH INTEGRAL GAIN NAI D.140 VOLT /VOLT-SECOND. THERE WAS EXCESSIV' LEARAGE CURRENT FROM BE ENGEDA PJTCH LIFT-OFF FILTER SWITCH & ON ABAR ASSY, (27-45736-1) OF 59-41000-5, BEE FAILURE LOG 531-3-004.	FOR PAT VERIFICATIO TO 0.208 WOLT/WOLT-S ABBY	M ON THE SE ECOND. THER OF 98-41000	RVO ANP.	THE 2	JTCH INTEGRAL. LEARAGE CUR	
CORRECTIVE ACTION-60/S	CORRECTIVE ACTION-60/C TO PURCHASE PART FROM DIFFERENT WENDOR. P/N 67-85512-002 IS NEW PART TO BE INCORPORATED SY	MDOR. P/H 87-95812-D	28 18 MEV P	AAT TO BE	ž	APORATED BY E	

CONVAIR DIVISION

NATIONAL PARTIES. NATIONAL PART	8461 MOT SI	DIFFICUATIES REVIEW-AUTOFILOT SYSTEM-AIRDORME	FILOT SYSTEM-AIRBORP	¥		ŀ	Andreas de la companya de la company	
ANNLY ICA-CINCUIT DOAD RY-41000-865 ANNLY ICA-CINCUIT DOAD RY-41000-865 ANNLY ICA-CINCUIT DOAD RY-41000-865 ANNLY ICA-CINCUIT DOAD RAW BLAVES-04-656 WAS MITTEN REQUESTION ACCEPTANCE TEST (BAT) VERFICATION TESTING THE PAT VERFICATION ONE CYCLE. THE PATCHES SON THE PITCH 3 BOADO ASSE (PAN EZ-41280-11) BAT 23) CAUSED BY NAMEROUS VIGATION CYCLES DORING THE PAT VERFICATION STATE APPONDED S SET. 1985 PROVINCES FOR PARISH OF THE FORER SUPPLY MODILE CONSTSTING OF A REDSIGNATION SERVEDORD 17 AAA, 1985 INTERTITION AND STATEM FOR THE FORER SUPPLY MODILE CONSTSTING OF A REDSIGNATION SERVEDORD 17 AAA, 1985 INTERTITION ACCEPTANCE TEST (PAT) VERFICATION, THERE WAS NO BOOD TEST NOT CHANGE OFFICE AND AND ACASED BY A SHORT-CHICUITE TEST (BAT) VERFICATION, THERE WAS NO BOOD TEST NOT LE WAS CONFIDENT AND WAS CAUSED BY A SHORT-CHICUITE TEST (BAT) VERFICATION, THERE WAS NO BOOD TEST NOT LE WAS CONFIDENT AND WAS CAUSED BY A SHORT-CHICUITE TEST (BAT) VERFICATION, THERE WAS NO BOOD TEST NOT BE AND CONFIDENT AND WAS CAUSED BY A SHORT-CHICUITE TEST (BAT) VERFICATION, THERE WAS NO BOOD TEST NOT A ABOUT A SHORT AND WAS CAUSED BY A SHORT-CHICUITE TEST (BAT) WAS THE CONTACT TO THE CANA BE AND CONFIDENT AND WAS CAUSED BY A SHORT-CHICUITE TEST (BAT) WAS THE CONTACT TO THE CANA THE AAD ST TAN CHANCELS COALD NOT BE ERROTTING TO CHILD THE CONTUTIONAL AND STATEM AND SET TAN CHANCELS COALD NOT BE ERROTTING TO CHILD THE PART TO CHICUIT DUALLING PARAMETER TAND TO CHANCELS COALD NOT BE ERROTTING TO CHILD THE COATE AND THE PART TO COATE TO THE CANA A SPECIAL AUALLY TO DOCUME WHEN WHEN THE PART THE PART TO THE COATE TO THE CANA A SPECIAL AUALLY TO DOCUME WORLY (CT - 1333 WHEN THE PART TO AND THE PART TO THE COATE TO THE CANA A SPECIAL AUALLY TO DOCUME TO CHILD THE TAND A SPECIAL AUALLY TO DOCUME TO CHILD THE CHILD THE CHILD THE CANA A SPECIAL AUALLY TO DOCUME TO CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE CHILD THE C	\$15.7EM \$100-\$15.7EM	TESTUREPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART HUNDER	VEHICLE DATE DIF	\$11E	a to	VENDOR NAME	
THE ALLEGE. DURING PRODUCTION ACCEPTANCE TEST (PAT) VERIFICATION TESTING THE VERNIER I PITCH/R TO A THE STATEMENT OF CYCLE. THE FAILURE WAS CONTINED AND WAS DUE TO BROKEN CONSCIOUS ON THE PITCH 3 TO A SHARE OF CYCLE. THE FAILURE WAS CONTINED AND WAS DUE TO BROKEN CONSCIOUS ON THE PITCH 3 STATEMENT OF THE STATEMENT OF THE POST OF THE PART	AUTOFILOT-SQUARE-A/B SEFILTER AND SCRYGAMF AF	LV-44-04-5033F	FAR R7-41000-865	6209059	FACTORY	ž č		863238
ANY PARTON OF SECULD WAS MAINTEN REDESIGN OF THE AN MODUE TO ELINIMATE LEAD BREAKAGE DU SSOA APPROVED 8 SETT. 1985 PROVIDES FOR FOAKING THE FILTER MODUES AS TO PRE" TO CAMPOUT LEAD SSOA APPROVED 8 SETT. 1985 PROVIDES FOR FOAKING THE FOLICE CONSISTING OF A REDESIGN DESIGNATION LEAD AND CARACITORS. BY 1980-02 17 AGE. 1955 INTITATES A NEW DESIGN FOR THE POERS SUPPLY MODUE CONSISTING OF A REDESIGN DESIGNATION LOCATION DEAD AND CARACITORS. BY 1980-03-3034 FOR ANY PART PART PART PART PART PART PART PART	RUCTURAL FA	ILLRE, DURING PRODUCTION ACCEPTAN NG OME CYCLE, THE FAILURE NAS CON AR (P/N RT-41828-1, B/N R3) CAUSE	CE TEST (PAT) VERIF. FIRNED AND WAS DUE. D BY NUMEROUS VIBRA	ICATION TE TO BROKEN TION CYCLE	STING THE CONNECTIONS DURING	7 VER 7 VER 7 VER	A THE PITCH/R THE PITCH S PAT VERIFICATI	
SLY-99-04-3034F CIRCUIT BOARD-DIODE/INGUES 69-41000-9 CIRCUIT BOARD-DIODE/INGUES 69-41000-9 CIRCUIT BOARD-DIODE/INGUES ASSOCIATE TEST IRAT) VERIFICATION, THERE WAS NO BOOSTER ROLL E WAS CORFIDEND AND WAS CAUSED BY A SHORT-CIRCUITED ZENER 0100E CR-9 (10K0108) ON CIRCUIT BOARD, A 1310. CACIC OF THE DIODE FAILURE IS A CONTANINANT SHORTING THE DIODE SFRING CONTACT TO THE CAS SENER DIODE CRS CORRECTIVE ACTION. COPERATE AT PRESCRIBED TIME, DURING THE SEVENTH PAI VEHIFICATION VICEATION CRCLE OF THE SERVO DIO OPERATE AT PRESCRIBED TIME, DURING THE SEVENTH PAI VEHIFICATION VICEATION CRCLE OF THE SERVO THE SOLL OC AMALIFICE FOREN SUPPLY (E7-A1334-817) IN 41AE OF 89-41000-3, B/M 308-0000 REF SI-3-007. A SPECIAL BUALITY DIODE WILL BE INCORPORATED BY ECP 7383 WEN THE PART IS AVAILABLE. EARWOANDLIFTER SS-41000-2ES 650604 HO SS-81000-2FR FAR SS-41000-2ES 650604 HO SS-8000-10 HO SS-81000-10 HO SS-	CORECTIVE ACTION-RAR SLV E TO VIBRATION. ECP 3504 AP BEERALE, ECP 7691 APPROVED ED FOAMES HODGALE, REDESIGHES	99-04-805G MAS WRITTEN REQUESTING PROYED 8 SEPT. 1985 PROVIDES FOR 17 AUG. 1965 INITIATES A MEW DES D CIRCUIT BOARD ASSEMBLIES, AND	REDESIGN OF THE AB FOAMING THE FILTER LIGH FOR THE POWER S INCORPORATES SPECIAL	MODULE TO MODULES AS UPPLY MODI QUALITY D	ELIMINA TO PREV ALE CONST	TE LE	DE BREAKAGE DU DEFONENT LEAD OF A REDESTON ACITORS.	
SUBJECT OF THE DURING PRODUCTION ACCEPTANCE TEST (PAT) VERIFICATION, THERE WAS NO GROUP BOOSTER ROLL. E WAS COMPLEMED AND WAS CAUSED BY A SHORT-CIPCUITED ZENER DIODE CR-5 (1MO)168) ON CIRCUIT BOARD. IN 1910. CACHE OF THE DIODE FAILURE IS A CONTANINANT SHORTING THE DIODE SPRING CONTACT TO THE CAS SELECT OF THE DIODE FAILURE IS A CONTACT TO THE CAS SELECT OF THE DIODE FAILURE IS A CONTACT TO THE CAS SELECT OF THE DIODE FAILURE THE SELECT OF THE S	AUTOFILOT-SQUAFE-A/B SFILTER AND SERVOAMP C	LV-99-04-3034F IRCUIT BOARD-DICDE/INGGIEB	FAR 69-41000-3	620908	FACTORY	ž 8	HOFFMAN 1 H30 1 68	57173
SEREN DIOCE CRS COPERATE STRESS CRS CRS CRS CRS CRS CRS CRS CR	FAILUKE MODE-FAIL DURING O OUTPUL, ING FAILURE MAS CO PLM ET-41250-017, 3/W 1310. E INTERNALLY.	ING PRODUCTION AS CAUSED BY A DIODE FAILURE	PYAHCE TEST (PAT) VE F-CIRCUITED ZEMER DI CONTANIHANT BHORTIN	ALFICATION COE CR-5 6 THE DION	1, THERE (1, MA) (1, M	\$ 800 F 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O BOOSTER ROLL IRCUIT BOARD, ACT TO THE CAS	
SEREN DIODE CRS CRS CRS CRS CRS CRS CRS CRS	TON-NO CORR.	CINE ACTION.		-				,
THE CONTROL OF PRESCRIBED TIME, DURING THE SEVENTH PAT WERIFICATION VICEATION CTCLE OF THE TAY AND 52 T/R CHAMMELS COULD NOT BE ZERCED WHEN ATTEMPTING TO COTAIN THE OUTPUT UNGLARINE FIS ON THE SOLL OF AMMLIFIER POWER SUPPLY (ET-AISSS-817) IN AIRE OF 80-41000-5, B/M 308-000081-3-607. A SPECIAL QUALITY DIODE WILL BE INCORPORATED BY ECP 7383 WHEN THE PART IS AVAILABLE. CT-88-04-227 FAR 1310 368 YES 60/C STANDAMELIFIER 55-41000-623 45060-4	-	FRER DICOE CRS	UTP-PAT CR3	65080Y	v S	£ 5	1 M301 48	7561
A SPECIAL QUALITY DIODE WILL DE INCOMPONATED BY ECP 7983 WHEN THE PART IS AVAIL C7-88-04-227 FAR 1510 368 850804 858 WARNELEFIER 55-41000-825 850804	FAILURE HODE-FAILLD TO OPE AMP IN Y-AXIS. BI Y/R AND TELS. THE CAS DIGGE IS ON Y ER TO FAILURE LOG SSI-3-GO?	FAIE AT PRESCRIBED TIME, DURING SE Y/R CHAMMELS COULD NOT BE ZER HE SOLL DO AMMINIER POWER BUMPL!	TNE SEVENTH PAT VERI LED WHEN ATTEMPTING T (ET-A1558-817) IN	FICATION TO CETAIN AIAE OF B	VIERATION THE OUTP	444	E OF THE SERVO BALATE PARAME 1 308-0008. REF	
C7-88-04-227 FAR 1510 368 8CHYCAMPLIFIER 55-41000-625 850804	COPRECTIVE ACTION-A BPECIA	IL SUALITY DIODE WILL BE INCOMPOR	ATED BY ECP 7583 WHE	N THE PAR	1 18 AVA?	LABLE	•	
	AUTOFILOT-BOUARE-A/B C	7-54-04-227 ERVANGUETER	FAR 55-41000-025	1910	3	å ð	3/ 03	

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GENERAL DYNAMICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE
TEST/REPORT NUMBER FAILED COMPONENT MAIA
CORRECTIVE ACTION-RECOMMENDED INVESTIGATION OF MULL VOLTAGE GENERATOR PHASE SMITCH, IN THE TEST SET, FOR POSSIBLE LEFUNCTION.
FAILURE MODE-OUT OF TOLERANCE-DURING FLIGHT CONTROL BYSTEN TESTS, THE YAW INTERATION GAIN MAS OBSERVED TO SE HIGH A NO OUT OF TOLERANCE, THE FAILURE WAS NOT CONFIRMED AND NO CAUSE FOR THE REPORTED FAILURE COULD BE FOUND. CORRECTIVE ACTION-NOME.
1
FAILURE HODE- ERHATIC OPERATION, THE ELAPSE-TIME MODULE INTERHITTENTLY INTERRUPTED THE 400-CYCLES-PLR-SECOND POMER. THE FAILURE MAS CONFIRMED AND MAS DUE TO AN INTERMITTENTLY OPEN-CIRCUITED CAPACITON (G-3). CONSECTIVE ACTION-RAR SLW- 99-U4-8059 WAS WRITTEN REQUESTING THE VENDOR TO IMPROVE QUALITY-CONTROL AND BONDING THA MIQUES TO ASSUME PROFER DOWNING OF THE CAPACITOR (EAD) TO THE YOUR WORLD THE YOUR SECTIONS ASSUME PROFIED TO EAULYMAKENT RESISTANCE TESTS DURING GOVE RECEIVING INSFECTION. SPECIAL TESTS TO DETERMINE THE APLACETTY OF CAPACITORS TO WITHDRAND THE YOUR SHELY WILL BE SUBJECTED TO DURING NEXT ASSEMBLY. TESTING
•
FAILURE MOSE-ELECTRICAL SHALL DURING PERFORMANCE OF PROCEDURE 89-92020; PARAGHAPH 8.3.8; IT MAS REPORTED THAT THER E MAS NO EONSTER ACCESTER OLDCES. E MAS NO EONSTER KOLL SIGNAL FUTPUT, THE REPORTED FAILURE MAS CONTRNED AND NAS DUE TO SHORT-CIPCUITED TENER DIODES. CK-10. CR-11. CR-12. AND CR-13. 0831CSF [N THE ROLL D-C AMPLIFIES P/H ET-41358-025, 3/H 41001D1. THE EMACT CAUSE OF THE ZEMED DICOE FAILURE IS HOT EMAMN.
1
FAILUME MODE-ERRATIC OPERATION. THE BOOSTER & PITCH OUTPUT WAS REMONTED 3D PERCENT LOW FOR 1.5 SECONDS DURING A LA UMCH COUNTDOMM LOOF TEST. THEN STUMMED TO MOSHAL. THE REPORTED FAILURE WAS CONFIRMED AND WAS DUE TO AN INTERNITT EME TYPE RESISTOR (RS) P/N 88-75078-028 IN THE BERYDANPLIFIER BWITCH AND BURNING ASSEMBLY P/N 27-41383-803. B/N 408-
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	VENDOR NAME		ITION TAKEN BY		TEST (82 PITCH			AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.		E FAILIRE WAS TICHING THE IN	COMD 1 1 1 2 4 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4	YES AC ELECT. NO	RE ANALTRIS FO	ELEC. MAGNETI
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	BITE PRI	Paganapodilangilano, andrimingina	COR PROBU	ž	URING A				ETR-12	ION OUTPU	JI KEMENTS	PACTORY	NO OVER.	REMONE A
¥	VEHICLE DATE DIF	ė	ON TO REVI	299D 650604	74C LA.				244D	OCEDURES	GTHEN REQ	3050	E WENT HA	EFFECT TO
FILOT SYSTEM-AIRBOR	DIF DATA SOURCE PART NUMBER	O NEVER BEEN BOLDER	CONVAIR DESIGN ACTI HE SERIOUSHESS OF T	COUNTDOMN	. NERE INDICATED ON				FAR 1 27-41000-881	FOR NOH-LINEAR ROLL ; CAPACITOR, TEST FR	r CIC 07966 TO STREA	W-000044-FW	IR/D WHEN B-1 ENGIN LED CAUSING NUMEROUS	T. 1964 IS STILL IN TAMP.
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	YELLYREPORT NUMBER FAILED COMPONENT NAME	TAS COMECTIONS INSIDE THIS RESISTOR HAD NEVER BEEN SOLDERED.	CORRECTIVE ACTION-RAR NZ-90-04-8051 MAS WRITTEN REQUESTING CONVAIR DESIGN ACTION TO REVALUATE THE POSITION TAKEN STREES REPORT 558-64-0628 WHICH ATTEMPTS TO STATISTICALLY REGATE THE SERIOUSNESS OF THIS RESISTOR PROBLEM SINCE THIS LATES FAILURE OCCURRED DURING A MISSILE LAUNCH COUNTDOWN.	A1-402-00-299	SFECIFICATION. INPROPER DISCRETE RIGHALS WERE INDICATED ON THE LAP DURING A LOOP TEST (82 PITCH	ER DISCRETE SIGNALS.	NAME AND SET TO SET SET SET SET SET SET SET SET SET SET	- F-0	LV-98-04-5013F CIRCUIT BOARD INFEGRATOR CAPACITOR 27-41000-881	FAILURE MOCE-OUT OF TOLCHANCE. THE SCRNOAMHLIFIER WAS IR7D FOR MOM-LIMEAR ROLL INTEGRATION OUTPUT. THE FAILURE WAS PROBABLY DUC TO INSUPTICIENT CONDITIONING OF THE INTEGRATING CAPACITOR. TEST PROCEDURES CALL FOR CONCITIONING THE IN TEGRATING CAPACITOR DEFORE DOING INTEGRATING TEST.	CORECTIVE ACTION-PARAMETERS DOCUMENT 69-00703-1 REVIMED BY CIC 07966 TO STREWSTHEN REQUIREMENTS FOR CONDITIONIMG HEGRATING CAPACITORS.	NZ - AB-CA - SCHO-P VRANSFORMER	FAILURE MODE-FAIL DURING OPERATION. A/P SERVOAMMIFIER WAS IR/D MHEN B-1 ENGINE MENT HARD OVER, FAILURE ANALYSIS FO AND TRANSFORMER 1-1 UP/H 27-D4163-3) (AC ELEC.37D4) HAD FAILED CAUSING NUMEROUS OTHER COMPONENTS TO BURH-OUT OR SHOR '-	CORRECTIVE ACTION-BURVEY INSTRUCTION BILBS-64 ISSUED RE OCT. 1964 IS STILL IN EPFECT TO REMOVE ALL AC ELEC. MASHETI C COMPONENTS NOT IDENTIFIED WITH A DOUBLE 60/C ACCEPTANCE STAMP.
	BYBIEK BUB-BTBIEK	0003. OME OF THE END TAB	CORRECTIVE ACTION-RAN NZ- REPORT 558-64-062B WHICH T FAILURE OCCURRED DURING	AUTOPILOT-SQUARE-A/B	FAILURE HODE-CUT OF SFE AND GINBAL TESTI.	STREET EFFECT-IMPROPER	MENSOLE EFFECT-COUNTDOMN ABORTED	CORRECTIVE ACTION-UNKHOWN.	AUTOFILDT-SQUARE-A/B	FAILURE MODE-OUT OF TOL PROBABLY DUC TO INSUPTIC TEGRATING CAPACITOR DEFO	CORRECTIVE ACTION-PARAM MTEGRATING CAPACITORS.	AUTOFILOT-SQUARE-A/S FILTER AND SERVOAMF	FAILURE MODE-FAIL DURIN UND TRANSFORMER T-1 UF/H T.	CORRECTIVE ACTION-BURVE C CONFONDATS NOT IDENTIF

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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AUTOPILOT-SQUARE-A/B FILTER AND BERYDAMP	69C2496.R CR-9 D1CDE	# #5.7 # LO	#3030# CD/C	ų	YES GENERAL ELECTR NO IC		35.000
PAILURE MODE-OFFN-ELEC O BROKEN ANODE LEAD OF	FAILURE MODE-OFEN-ELECTRICAL-DURING PRI X-AXIB TEMPERATURE-VIDRAT'ON, MINUS GOVOC POWER SUPPLY BECOME ERRATIC DUE Bronen amode Lead of CR-s diude om Urasai Power supply module, refer to Pailure Log munder 55s-3-010.	RE-VIBRAT'ON, MINUS 60 MODULE, REFER TO FAILE	NDC POWER BUT	PFC 88	COME ERRATIC	puc 1	
CORRECTIVE ACTION-1MSS ER SUPPLY MODULE AND US	CORRECTIVE ACTION-IMSS& DICOES TO BE REPLACED WITH INSAG DICOES (P/M 68-63110-5). ECPT&81 SUBMITTED TO REDESIÓN FOM R SUPPLY MODULE AND USE FORM WAS APPROVED.	DICOES (P/M 69-63110-	-53. ECP7691	T I MODINE	ED TO REDESIG	2	
AUTOPILOT-SQUARE-A/S FILTER AND SERVOANF	SLV-99-04-4990F MODULATOR ASSEMBLY INDUCTOR	FAR E7-41359-627	7401 FAC #50302	FACTORY	YES NO		602863
FAILURE MODE-OUT OF TO UTED TO A DEFECTIVE OW	FAILURE MODE-OUT OF TOLERANCE. UNIT REJECTED WHEN THE AC CONVERTER GUITMUT WOLTAGE MAS EXCESSIVE, FAILURE MAS ATTRIB UTED TO A DEFECTIVE CHOKE, WHICH WAS SHORT CIRCUITED INTERMILLY.	CONVERTER GUTTUT VOLT	TAGE NAS EXCE	381 VC.	FAILURE WAS A	TRIB	
CORRECTIVE ACTION-NOME 8.	CORRECTIVE ACTION-WOME. EXACT CAUSE OF SHORT CIRCUIT COULD NOT BE DETERHINED AND THE VENDOR IS NO LONGER IN BUSINES	LD NOT BE DETERMINED A	ING THE VEHDOM	9 =	LONGER IN BU	SINES	,
AUTOPILOT-SQUARE-A/B FILTER AND SERVOYMP	LV-A9-04-4968F SERVCAMPLIFIER TRANSISTOR	7AP 27-41000-841	#640 FAC	FACTORY	7CS 60/C HO		*****
FAILURE MODE-OUT OF TO FROM POSITIVE MAS ELEM MVERTED GITN OF LESS TH	FAILURE MODE-OUT OF TOLEMANCE. UNIT MAS REJECTED DURING FINAL VENICLE CPECKOUT MHEM THE YAM INTEGRATOR MALLING TIME FROM POSITING MAS EIGHT TIMES LONGER THAN FROM NEGATINE, THE NIMOR PROBLEM WAS ATTRIBUTED TO A TRANSISTOR MITH AN I NERTED GILK OF LESS THAN 1.	FINAL VENICLE CPECKOU! THE MINOR PROBLEM WAS	MACH THE YAI	2 INTEG	AATOR MALLING ANSISTOR MITH	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
CORRECTIVE ACTION-NOME.	E. THIS IS FIRST SUCH CASE REPORTED, AND IS CONSIDERED MINOR.	, AND IS CONSIDERED MI	HOR.				
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF	3LV-99-04-4990F 5crnomplifier	FAR E7-41361-013	7104 FAC	PACTORY	7E8 NO		*****
FAILURE MODE-ERRATIC OPERATION. AMMEL: FAILURE INS CONTINED. HOM LY DESTROYED DURING THE AMALYSIS.	OPERATION. UNIT WAS REJECTED FOR BEING THE BOUNCE OF HISH PREQUENCY OBCILLATIONS IN THE TAN CH FIRMED. HOMEWER, CAUSE OF PAILURE HAS NOT DETERHINED BICAUSE THE FAILED SAMPLE WAS INADVERTENT ME AJALTSIS.	ING THE BOUNCE OF HISP AS NOT DETERHINED BUCH	- PREQUENCY OF	2011LAT	IONS IN THE V LE WAS THADYF	A WE CA	
CORRECTIVE ACTION-MONE	CORRECTIVE ACTION-WOME. CAUSE OF PAILURE MAS NOT DETERMINED.	ÆO.					
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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SITE PRI VENDOR MANE TIME DIF OTH VENDOR PART NO		. FAILUME ATTME		ATTRIBUTED TO DAMACED HIGH YOLTAGE, MONEVER	PEARED TO BE T		ERING COMUND.	TES TEXAS INSTRUME NO NTS	TICH MASREFORTE	AND THAT EVERY	PAGE DABS
F O	. O.	<u>\$</u>	ž ž	18 18 U	ER AF	F 5	A 37.	Ç g	# 150 E		
	FACTORY	SPECIFICA GROUND.	ž	C MAS ATT	\$ 5 5	5 - 6	PO43£ 10	FACTORY	ULL WOLTA	O HOT WEL	
VEHICLE DATE DIF	1960	BEING OUT OF SPECIFIC THE OUTPUT TO GROUND.	7401 \$501£0	K. FAILUR	APPLICATION	1720	EL 14 RES	7110-	R-E YAW M	EVEALED N	
DIF DATA BOURCE PART HUMBER	FAR 27-41561-801	T Z YAM OUTPUT BEIN-CIRCUITING OF THE	FAR 69-41000-803	DURING MAPCHE CHEC ICATED EATERMAL MIS	GATION AND THAT MIS	FAR 27-75094-1	OT OF THE YAM CHANG	FAR 69-41000-803	DURING VEHICLE CHECKOUT FORBOOSTER-R YAW MULL VOLTAGE WHICH WASREFORTE DIODE OPEN CIRCUIT, CAUSED BY EXCESSIVE MELDING HEAT USED IN ATTACHING FAILURE.	TOK OF 1000 UNITS F	
TEST/REPORT NUMBER FAILED COMPONENT NAME	LV-89-04-4892F BERYCHWELFIER TRANSISTOR	FAILURE MODE-OUT OF SPECIFICATION. UNIT REJECTED FOR BOOSTER 2 YAM OUTPUT BEING OUT OF SPECIFICATION. FAILURE ATTRIBUTED TO A SHORTED TRANSISTOR. CAUSED BY AN ACCIDENTAL SHORT-CINCUITING OF THE OUTPUT TO GROUND. CORRECTIVE ACTION-FACTORY PERSONNEL WERE CAUTIONED TO PROPERLY USE TEST EQUIPMENT.	3LV-90-04-4976F SERVONWLIFIER DICOE	OPEN. UNIT HAS REJECTED FOR FAILURE DURING MAPCHE CHECK. FAILURE WAS ATTRIBUTED TO DAMAGED HO DE AMELEN. THE DIODE DAMAGE INDICATED EATERHAL HISAPPLICATION OF HIGH VOLTAGE, HOMEVER RAL ERROR COLAD BE FOLAD.	WAS ADVISED OF RESULTS OF THE INVESTIGATION AND THAT MISAPPLICATION OF POWER APPEARED TO SE	A-90-04-4979F	ERANCE, UNIT REJECTED FOR AN OVERSHOOT OF THE YAW CHAMMEL IN RESPONSE TO A STEERING COMMAND.	SLV-A9-04-4966F BERYCAHCLIFIER DICOE	ERANCE, UNIT REJECTED DURING VEHICLE CHECKOUT FORBOOSTER-E YAN HULL VOLTAGE WHICH WASREFORTE 1 OPEN CIRCU,TED ZENER DIODE OPEN CIRCUIT, CAUSED BY EXCESSIVE MELDING HEAT USED IN ATTACHING ESULTING IN LEAD WIRE PAILURE.	INSTRUMENTS ADVISED VISUAL EXAMINATION OF 1000 UNITS REVEALED NO HOT MELDS. AND THAT EVERY IMPROVE THEIR MELDING TECHNISHE.	
STRTEM SUB-STRTEM	AUTCHILOT-BRUNRE-A/B	FAILURE MODE-OUT OF SPEC BUTED TO A SHORTED TRANS. CORRECTIVE ACTION-FACTOR	AUTOPILOT-SQUARE-A/B PILTER AND SERVOAM?	FAILUEE MODE-ELECTRICAL OPEN. UNIT WAS ZENER DIODES IN THE PITCH DC AMPLIFIER. NO EVIDENCE OF A PROCEDURAL ERROR COALD	CORRECTIVE ACTION-LITE W	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLI	AUTOPILOT-SQUARE-A/B FILTER AND SERVOAM	PAILURE MODE-OUT OF TOLE D TOO HIGH. CAUSED BY AN AM INTERNALLEAD WIRE, RE	CORRECTIVE ACTION-TEXAB EFFORT MOULD BE MADE TO	

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HUNGER - WOLLDER - WILLIAM
FAILED CONFONENT NAME
SLV-A9-04-4986F SEX YOA MPLIFIER TRANSISTOR
CLERANCE, NIGH SUSTAINER PITCH POSITIVE VOLTAGE, RESULT OF A HUGHES HA7534 TRANSISTOR FAILURE. ARE CREATIMS A SHORT RESULTING IN EXCESSIVE COLLECTOR TO EMITTER CURRENT.
CORRECTIVE ACTION-HUGHES CHAMGED IN 1950 AND 1962 TO ALLEVIATE THIS TYPE OF FAILURE. THIS TRANSISTOR HANUFACTURED Lor to 1962.
60/A-BN764-045/P6-LO-03-0AC4
FAILURE HODE-OUT OF TOLERAWCE, DIVERGENT PROPELLANT SLOBM FROM 14G SECONDS TO BECO (149 SECONDS), MAXIMUM ZERO-TO-P EAR RATE VALUES JUST PRIOR TO BECO WERE 1:1 DEGREES PER SECOND IN PITCH: E.1 DEGREES PER SECOND IN ROLL: AND LESS TH AN D-1 DEGREE PER SECOND IN TAM.
BYSTEH EFFECT-OPERATION TOO HIGH-BOOSTER ENGINE DEFLECTIONS IN PITCH NERE D.7 DEGREEB HALF-AMPLITUDE. BOOSTER ENGIN E HOVEHENIS IN ROLL MERE NEGLIGIBLE. VERNIER MOVEMENT REACHED 13 DEGREES PEAK TO PEAK IN ROLL.
MENICLE EFFECT-NOME, PROPELLANT SLOSH CONDITION MIGHT MAVE DEVELOPED INTO A MENICLE STABILITY OR STRUCTURAL. IF BECO HAD BEEN DELAYED SIGNIFICANTLY.
CORRECTIVE ACTION-END-TO-END POSITION AND RATE GAINS DURING FLIGHT PERIOD FROM 110 SECONDS TO BECO WERE REDUCED UBSERUENT CENTAUR BOOSTERS. REFERENCE CLC 07818 AND ECP 7972R1.
CT-99-04-191 AMPLIFIER, TRANSISTOR-2N498
FAILURE HODE-OUT OF TOLEPANCE. THE SERVOAMPLIFIER ASSEMBLY WOULD NOT MULL DURING AN ELECTRICAL CHECKOUT, THE REPORT ED FAILURE WAS CONFIRMED AND WAS DUE TO FAULTY TRANSISTORS Q-4 AND Q-5 (BOTH RREEM 2MASS). TRANSISTOR Q-4 HAD HIGH OUT-OF-TOLERANCE LEARAGE CURRENT FROM COLLECTOR-TO-BASE, TRANSISTOR Q-5 HAD RELATIVELY HIGH SATURATION RESISTENCE. NO CONTAMINANTS OR NAMEACTURING DEFECTS WERE APPARENT IN EITHER TRANSISTOR.
CORRECTIVE ACTION OR RECOMMENDATION.
BLV-99-04-4847F BERVO AMPLIFIER CAPACITOR
OPERATION. VERNIER AMPLIFIER OUTPUT COULD NOT BE CONTROLLED. PAILURE IS ATTRIBUTED TO A DIÉLEC BASE CAPACITOR.

FAILURE MODE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME, AN AGE PROGRAMMED ROLL BIAS EXCERCISE (STATIC GAIN) DURATI ON KAS 1.4 SECONDS LONGER THAN EXPECTED, FAULTY AGE UMLATCH RELAY MAS THE CAUSE OF THIS DISCREPANT CONDITION.

WEMICLE EFFECT-COMPOSITE DELAYED. POST COMPOSITE TESTING REGUIRED.

STRIKH EFFECT-OPERATION TOO LONG.

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CT-08-04-177 BUTCH BOARD TRANSISTOR SS-41000-811 FOR CIRCUIT BOARD TRANSISTOR SU-41000-811 BUTCH TO A BROKEH ENITER-TO-845E BOAD IN A ENSEAN TRANSISTOM IN THE ASAE SERVONMPLIFIER CIRCUIT BUTCH TO A BROKEH ENITER-TO-845E BOAD IN A ENSEAN TRANSISTOM IN THE ASAE SERVONMPLIFIER CIRCUIT BUTCH TO A BROKEH ENITER-TO-845E BOAD IN A ENSEAN TRANSISTOM IN THE ASAE SERVONMPLIFIER CIRCUIT BUTCH TO A BROKEH ENITER-TO-845E BOAD IN A ENSEAN TRANSISTOM IN THE ASAE SERVONMPLIFIER CIRCUIT BUTCH TO A BROKEH ENITER TRANSISTOM IN THE ASAE SERVONMPLIFIER CIRCUIT BUTCH TO A BROKEH MEST TRANSISTOM ENITER TRANSISTOM ENITER TRANSISTOM ENITER TRANSISTOM ENITER TRANSISTOM ENITER TO PRINT TRANSIST OF REPURSES F CANAGE FOR MICHAEL PRINTS SOUTHERN TO BACK THE ASAEL MEST ASSECTED AT 180 DURING OFFICE TRANSISTOM ENITS TO BACK THE ASAEL FEED AT 180 DURING OFFICE TRANSISTOM ENITS TO BACK THE ASSECTION OF CALIBRATION ENITS TO BACK THE ASSECTION OF CALIBRATION ENITS TO BACK THE ASSECTION OF CALIBRATION ENITS TO BACK THE ASSECTION OF THE TRANSIC OF THE TRANSIC OF THE TRANSIC OF THE TRANSIC OF THE TRANSIC OFFICE TRANSIC OF THE TRANSI	CTION-REPL	ACED AGE UMLATCH RELAT.			Action of the second	des printiparents visiones exceptions	838868
BUTED TO A BROKEN ENTITER-TO-BASE BOND IN A ENGEAT TRANSISTOR IN THE ASSESSMENTIFIER CIRCUIT B BUTED TO A BROKEN ENTITER-TO-BASE BOND IN A ENGEAT TRANSISTOR IN THE ASSESSMENTIFIER CIRCUIT B THE STATEMENT OF THE	IRE-A/B	CT-98-04-177 CIRCUIT BOARD TRANSISTOR	FAR 55-410G0-811			S RATTHEON	• 14.24
HE SUNCTION REPORT AN ENGEN INTITION, VIA RELIABILITY ACTION REPORT ALV-99-04-3918 ASKING FROM STOCK, SUNVEY COMPLETION ON JUNE 30, 1964 RESULTED IN 1431 ED. 18 34-7-9-04-48A3-F 19 34-7-9-04-48A3-F 19 34-7-9-04-48A3-F 10 57-41643-613 10 57-41643-613 10 57-41643-613 11 57-41643-613 12 57-41643-613 13 57-41643-613 14 57-5164 RESULTED IN 150 FOR THE STOCK TO THE STOCK TO THE STOCK TO THE STOCK THE STOCK TO THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK TO THE STOCK THE STOCK TO THE STOCK THE STOCK THE STOCK TO THE STOCK THE STOCK TO THE STOCK THE STOCK TO THE STOCK THE STOCK TO THE STOCK THE STOCK TO THE STOCK TO THE STOCK TO THE STOCK TO THE STOCK TO THE STOCK THE STOCK TO THE STOCK THE STOCK THE STOCK TO THE STOCK TO THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK THE STOCK TO THE STOCK THE	-FAIL DURY	WE OPERATION. THE BOOSTER E EMEINE TO A BROKEN EMITTER-TO-BASE BOLD	. WAS DRIVEN HARD OVER IN A CHSEGA TRANSISTON	IN PECATIVE IN THE ASAR	VAN. THE	FAILUNE WAS CONF LIFIER CIRCUIT B	
TOLERAWE. THE AVERTICAS EXPROMPLIFICA EXHIBITED A HIGH MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LEVEL MOISE LONG MOISE LEVEL MOISE LEVEL MOISE LONG MOISE CALIBRATION RESISTORS WHICH WERN HOLD TO GO MOI. THIS CAUSED THE AMELIFIER TO GECOME SALEMIES TO GO MOI THIS CAUSED THE AMELIFIER TO GECOME SALEMIES THE SOUTH MOISE LEVEL MOISE CONTINUATION. THE MOISE LEVEL MOISE DOT THE AMELIFIER ASSEMBLY PESULING MOISE WAS WIND MOISE MOISE OF THE THYORTAME OF CAREFUL SELECTION OF CALIBRATION HESISTORS. TASK WHE DISCUSSED TO ELINHAIE MORGHAL STABLLIFER ASSEMBLIES. THE MOISE MOISE MOLITICAL MOISE MOISE DIGHTHAND ONCE ADOUT ANALYSIS ISCLAFED THE CAUSE TO GOODITM I YAM SERVAMMLIFIER CIRCUIT, TRANSFORMER TE. THE FAILURE MOLDERED COMECTION ON THE SECONDARY WINDING OF THE THANFORMER. THE REMY TO BAR BLY-8D-04-3862 RECOMBINATE HAS BECOME WACCESTABLE. ECP 7860 WAS PREPARED TO ACT TO REPLACE AC ELECTRONICS, MOORE PORTORING THAN MOLDERED CONCERTOR TO PERCENT GO AC ASSEMBLY MODINE AND MONES THANK TO MAKE THOSE TO PROPERTY OF ALL AC ELECTRONICS, MOORE PARTS MANNIFORMED PARTS WITH DOUGLE STAMBED PARTS WITH MATCH TO PARTS.	ACTION-SURY L. RAYTHEON SCRAPPED.	EY INSTRUCTION 66-64 WAS INITIATED ENGESA AN ENGESA IRANSISTORS FROM	, VIA RELIABILITY ACTI STOCK, SURVEY COMPLETI	ON REPORT BL	V-99-04-3	SULTED IN 1451	•
CF TOLERAME, THE AZP SCHWAMPLIFICE EXHIBITED A HIGH POISE LEVEL 1801 MY P-DY WHEN TESTED AT 180 D SALE OF LEAN THAN 10 MY POINT TO POINT 10 POINT 15 STEM REVEALED INF. HIGH MOSE LEVEL WAS CAN SALE OF LEAN THAN 10 MY POINT TO POINT 10 POINT 15 STEM REVEALED INF. HIGH MOSE CANCILLAND CANDEL AND CALLENAL WAS CANDELED TO CALLE AND CALLED TO BE SALE OF ERATION OF CALLED THE HIGH MOSE ONT THAN 1916 ONT THE MOSE OF THE IMPORTANCE OF CAREFUL SELECTION OF CALLED AIL HOLD FROM THAN 1916 ONT THAN 1916 ONT THAN 1916 ONT THE IMPORTANCE OF CAREFUL SELECTION OF CALLED AIL HOLD FROM HIGH MOSE ABOUT 3.4 V-20-64-4850-F 1-2 TRANSFORMER 3.4 V-20-64-4850-F 1-2 TRANSFORMER 3.4 V-20-64-4850-F 1-2 TRANSFORMER 3.4 V-20-64-4850-F 1-2 TRANSFORMER 3.4 V-20-64-4850-F 1-3 TRANSFORMER 45-41000-3 1-4 TRANSFORMER 45-41000-3 1-5 TRANSFORMER TE, THE FAILED WHEN BOOSTER I ENGINE WENT HAND OVER ABOUT TO RELUET TO RAN PREPARED TO A SHANFILLAND TO BEALTH BY 1944 DIRECTIVE, THAN SHANFORMER TO A CHARLE OF THE WAS PREPARED TO A CHARLE BY 1944 DIRECTIVE, TO A SHANFILLAND AND THE STANFED PARTS HAND WORK BY 10 PRAFEIL OF A LLA CENTER OF A LLA CENTER OF A SHANFEL DE SHANFE PARTS HAND WE STANFED PARTS HAND AND THE BY 1944 DIRECTIVE, OF A LLA CENTER OF THE BANFED PARTS HAND AND THE BY 1944 DIRECTIVE OF A LLA CENTER OF THE BANFED PARTS HAND WE WAS PREPARED.	ARE-A/B	SLV-CG-4843-F AMPLETER RESISTORS	514-545 54-14 54-14			et ,	99316
TASK WERE DISCUSSED TO ELIMINATE MARGINAL STABILITY OF AMPLIFIER ASSENDICES. SAV-30-64-4890-F SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SAV-30-64-4890-F TAR SECONDARY WINDING OF THE TRANSFORMER TE. THE FAILURE NECLOFICE CONNECTION ON THE SECONDARY WINDING OF THE TRANSFORMER TE. THE FAILURE TO REPLY TO EAR SLV-80-64-5902 RECOMMENCE HAS BECONE UNCLEPTABLE. EEP 7000 WAS PREPARED TO ACT IN THE INTERIN, BY USAF DIRECTLY COLD ACT ACT PARTS MANUACTURED UNDER 100 PERCENT GOA SURVEILLANCE. IN THE INTERIN, BY USAF DIRECTIVE, ONLY ACT PARTS MANUACTURED PARTS WITH DOUBLE STAMPED PARTS.	E-OLICE TO FINAL SELEC FLASE FROM RECALIBRAT	LERANCE, THE AZP SCRWCHMPLIFICK ED LENS THAM SO MY MOINT TO FOINT T TION OF CALIBRATION RESISTORS MHIC 43 TO BB. THIS CAUSED THE AMPLIFIE SON OF THE AMPLIFIER ASSEMBLE PESS	MIBITED A HIGH POISE LONG TO THE PARTY OF MIST DESTREAM HAND WISE SALIGHTLY LATED IN STABLE OPERATI	EVEL (80 HY REVEALED THE EURIES F CAI HYTABLE METY ON UNDER ALL	Park Color of the	TESTED AT 180 D SE LEVEL WAS CAU AIN OF TRANSISTO OF HEW NOTSE OUT DITTONS.	
3 SLV-3D-GA-1890-F FAR 64000-5 NO S. 7-E TRANSFORMER NO SERVOAMPLIFIER FAILED WIEN BOOSTER I ENGINE WENT HARD OVER ABOUT ANALYSIS ISCLATED THE CAUSE TO BOOSTER I TAM SERVCAMPLIFIER CIRCUIT, TRANSFORMER TE. THE FAILURE NEGLEET CONNECTION ON THE SECONDARY WINDING OF THE TRANSFORMER. -IN REELY TO PAR SLV-8D-04-3982 RECOMMENDATIONS, AIR FORCE TWX OF 8-30-64 DIRECTS GD/A TO QUALIFY TO RELICE AC ELECTRONICS, WHOSE PERFORMANCE HAS BECOME UNACLEPTABLE, ECP 7060 WAS PREPARED TO AC. IN THE INTERIN, BY USAF DIRECTIVE, ONLY AC PARTS MANNESD PARTS WITH BOURLE STAMPED PARTS.	ACTICA-FACT	ORY PERSONNEL WERE ADVISED OF THE WIRE DISCUSSED TO ELIMINATE MARGI	IMPORTANCE OF CAREFUL	SELECTION OF FIER ASSENDE	CALIBRAI		
	APE-A/3	34.V-20-04-4890-F 7-E TRAUSFORMER	FAR 69-41000-5			S A.C.ELECTRONIC	883788
	E-FAIL DURIN TEST ANAL' TAN UNSOLD!	NG OPERATION, THE AUTOFILOT SERVOA TATA ISCLATED THE CAUSE TO BOOGTER ERED CONNECTION ON THE RECONDARY W	HPLIFIER FAILED WIEN B I YAW SERWCAMPLIFIER INDING OF THE TRANSFOR	OOSTER 1 ENG CIRCUTT, TRA MER.	INE WENT	HARD OVER ADGUT TR. THE FAILURE	
ON MISSELES 7104, 7106 AND 7110 MAS ALSO ONDERED BY USAF.		EPLY TO EAR SLY-SD-D4-3982 RECORNE EPLACE AC ELECTRONICS, MHOSE PERFO THE EXTERIM, BY USAF DIRECTIVE, ON MHALL BE USED. RETROFIT OF ALL AC AMD TAID WAS ALSO ONDERED BY USAF	NDATIONS, AIR FORCE TE REMECE HAS BECOME UNAC LY AC PARTS MANUFACTUR ELECTROMICS SIMELE ST	X OF 9-30-64 LEPTABLE: EC ED UNDER 100 AMPED PARTE	DIRECTS P 7840 WA PERCEST WITH DOUG	60/A TO QUALIFY 5 PREPARED TO AC 60/A SURYCILLAM LE STAMPED PARTS	
				•			

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231474-204	FAILED CORPONENT NAME	DIF DATA ACURCE	VEHICLE DATE DIF	BITE PRI	BITE PRE VENDOR NAME	
AUTOFILOT-MQUARE-A/B	BLY-90-04-4887-F TRANSFORMER	74.8 R7-04446-1	410013	PACTORY HO	TRAMBONIC	****
FAILUME MODE-FAILED DI ELAMP CUT INTO THE COM. . THE TRANSFORMER WAS "	FAILUME MODE-FAILED DURING OPERATION, EXCITATION TRANSFORMER APPEARED TO HAVE BEEN BHORTED EXTERNALLY WHEN A CABLE Clamp cut into the commecting wires. These wires were found birned, test analysis of the transformer found ho danage . The transformer was then operated under load for 10 mimutes with no halfunctions observed.	CHAKER APPEARED TO HAVE DULL BURNED, TEST ANALY INUIES WITH NO HALFUNCT	BEEN BHORT BIS OF THE TONS OBSERV	ED EXTERNAL TRANSFORMER ED.	LY WHEN A CABLE . FOUND NO DAMAGE	
CORRECTIVE ACTION-NO	CORRECTIVE MAS TAKEN AS THIS WAS A SECCNOARY FAILURE AND PERSONWEL AT WIR REPAIRED THE CABLE	A SECONDARY PAILURE AND	PERSONNEL	AT WIR REPA	INED THE CABLE.	
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	3LV-99-04-4692-F AMPLIFIER CAP4CITOR	FAR 27-41359-425	210072	PACTORY YES	YES GUDENAN HO	00370
FAILUKE MODE- ERRATIC PITCH/ROLL, TEST AMLTY TERMINAL FOIL,	FAILURE MOCE— ERRAYIC OUTPUT, THE MODULATOR ASSY EXHIBITED ERRATIC OUTPUT DURING PRODUCTION VIBRATION IN BOOMER R PITCH/ROLL, TEST AMALYSIS TRACED THE PROBLEM TO CAPACITOP C-2 WHICH MAD A DEFECTIVE INTERNAL BOND OF ONE LEAD TO THE TERMINAL FOIL.	ASSY EXHIBITED CRRATIC OUTPUT DUR TO CAPACITOP C-E WHICH HAD A DEFE	THE PRODUCT	ION VIBRATI	OUTPUT DURING PRODUCTION VIBRATION IN BOOSTER & HAD A DEFECTIVE INTERNAL BOND OF ONE LEAD TO THE	
CCARECTIVE ACTION-EQUITES VALLE HONITORING	CCARECTIVE ACTION-EQUIPMENT CYERATIONS PROCEDURES FOR SERVOAMPLIFIERS MERE MODIFIED TO INCLUDE A 3-HINUTE VIBRATION TEST WHILE MONITORING THE GUIPUTS FOR INTERNITIENT CONDITIONS.	SERVOAMPLIFIERS MERE HE	01 (1111)	HCLUDE 4 3-	HINUTE VIBRATION	
AUTOPILOF-SQUARE-AZB	E7-374K TRANSPORER	UT#-PET £7-04(79-5	£40911	607C YE3	YC3 A.C. ELECTRONI NO. C3 AC3695	60116
FAILURE MODE" OUT OF 1	SPECIFICATION. THERE MERE SEVERAL BURBLES CONTING FROM A SMALL HOLE ON THE BOTTOM OF THI TES NG EACH CYCLE OF THE INMERSION TEST, THIS MAS CAUSED BY INCORRECT MANUFACTURING PROCEDURES.	THERE MERE SEVERAL BURBLES COMING FROM A SMALL HOLE ON THE BOTTOM OF THE TEST IN THE INMERSION TEST, THIS MAS CAUSED BY INCORRECT MANUFACTURING PROCEDURES.	SMUL HOLE INCORRECT H	ON THE BOLL	CH OF THE TEST S IG PROCEDURES.	
CORRECTIVE ACTION-CARP	CORRECTIVE ACTICN-CARR 3548 SENT TO VENDOR. CARR 5547 SENT TO GOZA RECEIVING INSPECTION TO ALTER TEST METHODS 30 SE LIF "ALLURES WILL BE DETECTED, REF' FPR 5145 SWT.	SENT TO GO/A RECEIVING	INSPECTION	TO ALTER TE	.31 NETHODS 30 3E	
AUTOFILOT-SQUARE-A/B FILTER AND BERVOAMP	M2-90-04-48AOF BERYO AM-LIFIER RESISTOR	新一般的用をサールを ・	2450 640910	WTR YES	e e	
FAILURE MODE- FAIL DUR CIRCUITED WIREWOODD RES N BORD ""INEEN THE EMIT	FAILURE MODE- FAIL DURING OPERATION, DROP OUT OF BOOBTER FOLL BIGHAL, FAILURE ATTRIBUTED TO AN INTERMITTENTLY OPEN- IRCUITED MEREMOUND RESISTOR, AN INTERMITTENTLY OPEN-CIRCUITED TRANSISTOR WAS ALSO FOUND. THIS WAS CAUSED BY A BROKE I BOND "THEEM THE EMITTER LEAD AND EMITTER DOT.	CR ROLL BIGHAL. FAILURE SCUITED TRANSISTOR WAS	ATTRIBUTED ALBO FOUND.	TO AN INTE	MAITTENTLY OPEN-	
CORRECTIVE ACTION-VEND WE MAKINUM BPECIFIED. L	CORRECTIVE ACTION-VENDOR REPLY TO RAY 2-88-04-8781 STATES THAT RESISTOR FAILED SINCE ITS TEMPERATURE WAS RAISED ABC E maximum specified, use of zes desiee c'heltins bolder monld be better than usins meld terninations. In beply to r	FEB THAT REBISTOR FAILE NOVLD BE BETTER THAN	D BINCE ITS	TEMPERATUR TERMINATION	E MAS RAISED ABC	

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DIPFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	130081	901100		994162			164166			
PRI VENDOR MANE OTH VENDOR PART NO	SSG-G4-DEGB DATED NOVEMBER 25, 1964, PER RAR RA RAYTHEON ENGESA TRANSISTORS. NEW SOURCE IS SPER ENGEGA AND ENGESA WITH A SPECIAL PURPOSE TRANSI	YES A.C. ELECTRONI NO CS ACSSES	SOCEDIMES. NOCEDIMES. T HETHODS SO SE	YES GUDERAN NO	STATIC GAIN TES TERNITIENT OPEN LEAD CONTACT T	EQUENCY RESONAN THE YENDOR WAS EAKDOM.		URNED OPEN DIODE IN OUTP SERVONALVE-TO-GROUND EXT PITCH SWITCH-AND-SUMMING	ALLY SHORT-CIRC	3
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2	# # # # # # # # # # # # # # # # # # #	¥6.8	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SE SE	£ £	O OPE SVALV	10EN1	
VEHICLE SITE DATE DATE DIF	OVEMBER 2 Naistors. 17H A SPE	3/ 3	US FLOW O NUFACTURE TO ALTER	FACTORY	ALLED DUR EXHIBITION N OF THE	D TO RADI	FACTORY	A BURNET OF SERVINER PITCI	D BE ACC	
VEHICLE DATE DIF	H DATED NETGER THAN	640502	A CONTINUO CORRECT MA INSPECTION	640626	D NOT BE N CITOR C-E BEPARATIO	E SUBJECTE STRUCTURAL D TO FOIL	640616	FAILED DUE TO A (+ OUTPUT LINE OF IN THE SUSTAINER ITHE THE.	TPUTS COUL	
DIF DATA BOURCE PART NUMBER	H REPORT 556-64-026 PPED ALL RAYTHEON E REPLACE ENDESA AND	UTF-PET 87-04179-5	IA WAS CAUSED BY INC. TO GO/A RECEIVING I	FAR 27-41359-5	FOLL CHANNEL COLLI FIGATION FOUND CAPA S CAUSED BY PARTIAL SOLDER BONDING.	S FOIL CAPACITORS BITCH WARGINAL CAINST INTERNAL LEA	FAR 27-41000-865	SERVOAMPLIFIER FAI IT OF VERNIER E + O L FAILURE FOUND IN Y DETERIORATED WITH	SERVOAMELIFIERS OU URES USING A SANDWI ORS IN 60/A STOCK.	
TEST/REPORT NUMBER FAILED COMPONENT NAME	AR-A-98-04-3979 BOTH DESIGN AND PARTS ENGINEERING CONCUR WITH REPORT 856-64-0268 DATED NOVEMBER 25, 1964. PER RAR RA R A-89-04-3916, BURVEY 66-64 COMPLETED ON JUNE 30, 1964 BCRAPPED ALL RAYTHEON ENSESA TRANSISTORS. HEW SOURCE IS SPERRY SENICO-DUCTOR. IN ANSWER TO RAR A-90-04-3839 A REGUEST TO REPLACE ENGEGA AND ENSESA WITH A SPECIAL PURFOSE TRANSISTOR WAS DENIED.	e7as741 Transformer	LL HOLE IN THE BOTTON OF THE TEST SPECINEN FROM LOT 66. THIS WAS CAUSED BY INCORRECT MANUFACTURING PROCEDURES. LL HOLE IN THE BOTTON OF THE TEST SPECINEN FROM LOT 66. THIS WAS CAUSED BY INCORRECT MANUFACTURING PROCEDURES. CORRECTIVE ACTION-CARR 5548 SENT TO VENDOR. CARR 5547 SENT TO 40/A RECEIVING INSPECTION TO ALTER TEST METHODS SO SELLING FAILURES WILL BE DETECTED. REF' FPR 5185 SMT.	NZ-99-04-4866-F AMPLIFIER CAPACITOR	FAILURE MODE- OUT OF TOLERANCE, THE ROLL-MODULATOR ASSY (-) ROLL CHANNEL COLLD NOT BE MULED DURING STATIC GAIN TES TIMG AFTER 9 MIMUTES OF PRODUCTION VIBRATION TESTING. INVESTIGATION FOUND CAPACITOR C-2 EMHBITIMG INTERHITTENT OPEN CIRCUIT OPERATION WHEN SUBJECTED TO SHOCK OR PULL, THIS WAS CAUSED BY PARTIAL SEPARATION OF THE COIL LEAD CONTACT T O THE ALUMINUM FOIL MITHIN THE CAPACITOR DUE TO IMDEQUATE SOLDER BONDING.	CORRECTIVE ACTION-RAR NZ-99-04-3963 WAS ISSUED RECOMMENDING FOIL CAPACITORS BE SUBJECTED TO RADIO FREQUENCY RESOMM CE TESTS IN RECEIVING INSPECTION. THIS WILL HEED OUT CAPACITORS WITH MARGINAL STRUCTURAL MEARMESSES. THE VENOOR WAS ALSO REQUESTED TO IMPROVE HIS BONDING TECHNIQUE TO INSURE AGAINST INTERNAL LEAD TO FOIL COMMECTION BREAKDOMN.	LV-98-04-4872-F DIODE CR-5-AMLIFIER	FAILURE HODE-OPEH ELECTRICAL. VERNIER 2 YAW CHANNEL OF A/P SERVOANPLIFIER FAILED GUE TO A BURNED OPEN DIODE IN OUIP UT CIRCUITRY CR-5. DIODE DAMAGE RESULTED PROM A SHORT CIRCUIT OF VERNIER 2 + OUTPUT LINE OF SERVOANLYE-TO-GROUND EX ERMAL TO THE AUTOPILOT SERVOAMPLIFIER PACKAGE, AN ADDITIONAL FAILURE FOUND IN THE SUSTAINER PITCH SUTTCH-AND-SUMMING NETWORK MAS DUE TO A DEFECTIVE TRANSISTOR, MAICH APPARENTLY DETERIORATED WITH TIME.	CORRECTIVE ACTION-TEST RANCE PERSONNEL ADVISED THAT SERVO- SERVOAMPLIFIERS OUTPUTS COULD BE ACCIDENTALLY SHORT-CIRC UITED TO GROUND DURING TROUBLESHOOTING OR MONITORING PROCEDURES USING A SANDWICH PLUG. SURVEY INSTRUCTION 88-64 REMO WED ALL COMMERCIAL TYPE ENSESA AND ENSESA RAYTHEON TRANSISTORS IN 60/A STOCK.	
3731EM 848-3731EM	AR-A-98-04-3979 BOTH DESIGN AND R A-89-04-3916, SURVEY 66-84 CC RY SENICHDUCTOR, IN ANSWER TO STOR MAS DENIED.	AUTOFILOT-SQUARE-A/8 E: FILTER AND SERVOAMP TI	FAILURE HODE-OUT OF SPECIFICATION. DURING REALING ALL HOLE IN THE BOTTOM OF THE TEST SPECIHEN FROM LO CORRECTIVE ACTION-CARR \$548 SENT TO VENDOR. CARR 55 ALING FAILURES WILL BE DETECTED. REF. FPR 5185 SWT.	AUTOPILOT-SQUARE-A/B K FILTER AND SERVOAMP A	FAILURE MODE- OUT OF TOLERANCE TIME AFTER 9 HIMUTES OF FRODUCT CIRCUIT OFERATION WHEN SUBJECT O THE ALUMINUM FOIL MITHIN THE	CORRECTIVE ACTION-RAR NZ-9 CE TESTS IN RECEIVING INSPE ALSO REQUESTED TO IMPROVE H	AUTOFILOT-SQUARE-A/B L	FAILURE HODE-OFEH ELECTRICAL. UT CIRCUITRY CR-S. DIODE DANAG ERMAL TO THE AUTOFILOT SERVOAN NETWORK WAS DUE TO A DEFECTIV	CORRECTIVE ACTION-TEST RANGE UITED TO GROUND DURING TROUBLE VED ALL COMMERCIAL TYPE ENSESA	

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

	201100			99159			693555				
PRI VENDOR NAME OTH VENDOR PART NO	TES INTERNATIONAL NO RESISTOR	REPORTEDLY FAILED WHEN BOOSTER E PITCH STATIC GAIN MAS TO BOOSTER E PITCH SERVOAMPLIFIER, AMPLIFIER E ON CIRC TO FLAKING OFF OF A PORTION OF THE HETAL FILM INCREASISTOR WAS PROBABLY CAUSED DURING NANUFACTURE BY CONTANI	6D/C THAT ALL CRICICAL AREAS OF PROCESSIN WHITE ROOM PROCEDURES WERE ADOPTED.	YES 60/C	NAS CAUSED BY IN	ININATE MANUFACTU	TES CUDEMAN NO	PLIFIER PKG. WENT DIL SECTION BONDS ENAN CAPACITORS OF	AS MODIFIED BY GU	ř. Š	40-TO-END SAZN REA FALLED BECAUSE OF
817E 71ME DIF	FACTORY	TER 2 PIT LIFIER, A I OF THE H MING MANU	CRICICAL CEDURES M	FACTORY	TE87, THE	TO HELP EI	FACTORY	F SERYDAH RAL-70- F H ALL GUD NOV. 196	APACITOR :	FACTORY	E FITCH E
VEHICLE DATE DIF	1196	WEN BOOM H BERVOAM A PORTION CAUSED DU	THAT ALL	5000 000 000	AUTOHAT1C	PROCURED	640804	TAN ROLL O HE END SPI PRESENT 1	ESIGN OF C	£40804	E BOORTER STOR, THE LY BOLDERE
DIF DATA BOUNCE FART NUMBER	FAR E7-41000-031	AUTOPILOT SERVOAMPLIFIER REPORTEDLY FAILED ISOLATED THE DISCREPANCY TO BOOSTER & PITCH WAS CAUSE OF FAILURE DUE TO FLAKING OFF OF ILCHM. FAILURE OF THE RESISTOR WAS PROBABLY FILM MATERIAL.	CONCURRED BY ADVISING 60/C	FAR R7-41496-1	VE DIFFERENT STEPS OF . POTTING HOLD.	WAY POTTING MOLDS NERE	FAR 27-41645-1	ON TESTING, VERNIER 1." CTIVE BOND OF ONE OF TI IMDEGUATE BOND DESIGN INCH AND SHALLER PRODU	CODES 145 AND LOWER DI ITMIN CAPACITOR, MEMO , STIGATION IS PEPFORMED	FAR K-R 27-41000-853	LOT SERVOAMPLIFIER, THI LY OPEN-CIRCUITED RESI RESISTOR WAS ORIGINAL!
TEST/REPORT MUMBER FAILED COMPONENT NAME	A-A8-04-4887-F AMPLIFIER, RESISTOR	FAILURE MODE- OUT OF TOLERANCE. THE AUTOPILOT SERVOAMPLIFIER REPORTEDLY FAILED MHEN BOOSTER 2 PITCH STATIC GAIN MAS LOM OUT OF TOLERANCE, TEST ANALYSIS ISOLATED THE DISCREPANCY TO BOOSTER 2 PITCH SERVOAMPLIFIER, AMPLIFIER 2 ON CIRC UIT BOARD 27-41361-803, RESISTOR RIZ MAS CAUSE OF FAILURE DUE TO FLAKING OFF OF A PORTION OF THE NETAL FILM INCREASI NG THE RESISTANCE FROM 3.18 TO 7.2 KILCHIN, FAILURE OF THE RESISTOR MAS PROBABLY CAUSED DURING MANUFACTURE BY CONTAMI	ADVISED OF THIS AND HE RPORATION MERE EXCLOSED	BIMARY ASSEMBLY	FAILURE MODE-OUT OF TOLERANCE. THE BIMARY ASSY FAILED FIVE DIFFERENT STEPS OF AUTOMATIC TEST, THIS WAS CAUSED BY IN TTAMLLY INTERCHANCED LEAD WIRES 8 AND 2 DURING SETUP IN POTTING HOLD.	CCRRECTIVE ACTION-NEW INJECTION-WOLD PLASTIC DIE THROW-AWAY POTTING WOLDS NERE PROCURED TO HELP ELIMINATE MANUFACTU	NZ-99-04-4866-F AMPLIFIER CAPACITOR	FAILURE MODE-OUT OF TOLERANCE, DURING PRODUCTION VIBRATION TESTING, VERNIER 1 YAW ROLL OF SERVOAMPLIFIER PKG. MENT OUT OF TOLERANCE, ANALYSIS FOUND CAPACILUR C-1 HAD A DEFECTIVE BOND OF ONE OF THE END SPIRAL-TO- FOIL SECTION BONDS WITHIN THE CAPACITOR. THE DEFECTIVE BOND MAS A RESULT OF IMADEQUATE BOND DESIGN PRESENT IN ALL GUDENAN CAPACITORS OF EXTENDED FOIL CONSTRUCTION WITH CASE GIANCTERS OF 0.312 INCH AND SMALLER PRODUCED BEFORE NOV. 1961.	CORRECTIVE ACTION-CAPACTORS REMOYED FROM STOCK WITH CASE CODES 145 AND LOWER DESIGN OF CAPACITOR WAS MODIFIED BY GU DEMAN CO. TO ASSURE SOLDER FLOW AROUND SPIRAL CONNECTOR WITHIN CAPACITOR. WEND ANS-REL-64-1-FA-1 OF 31 JAN. 64 RECON MEND NO CAPACITOR CHANGE BE INSTITUTED UNTIL FURTHER INVESTIGATION IS PEPFORNED.	A-98-04-4870-F FITCH SWITCH AND SUMMING NETWORK-R 27-41000-853 ESISTOR	FAILURE MODE-OUT OF TOLERANCE. DURING CHECKOUT OF AUTOFILOT SERVOAMPLIFIER, THE BOORTER E PITCH END-TO-END GAIN REA ING MAS OUT OFTOLERANCE, THIS WAS CAUSED BY INTERHITTENTLY OPEN-CIRCUITED RESISTOR, THE RESISTOR FAILED BECAUSE OF M UNSOLDERED INTERNAL CONNECTION WHICH RESULTED WHEN THE RESISTOR WAS ORIGINALLY SOLDERED TO PRINTED CIRCUIT SOARD. THIS CAUSED INTERNAL SOLDER TO FLOW OUT OF THE RESISTOR.
8151EM 8UB-3751EM	AUTOPILOT-SQUARE-A/S FILTER AND SERVOANP	FAILURE MODE- OUT OF TOLERANCE, THE LOW OUT OF TOLERANCE, TEST AMALYSIS UIT BOARD 27-41361-4013, RESISTOR RIE NG THE RESISTANCE FROM 3,18 TO 7,2 KI MATION OF THE CERANIC BODY OR METAL P	CORRECTIVE ACTION-VENDOR MAS 6 UP TO AND INCLUDING FILM EV	FILTER AND SERVOAM	FAILURE MODE-OUT OF TOL	CORRECTIVE ACTION-NEW I	AUTOFILOT-SQUARE-A/B FILTER AND SERVOANP	FAILURE MONE-OUT OF TOLERANCE. OUT OF TOLERANCE. ANALYSIS FOUND THE CAPACITOR. THE DEFECTENTION OF THE DEFECTENT OF THE DEFEC	CORRECTIVE ACTION-CAPAC DEMAN CO. TO ASSURE SOLDS NEND NO CAPACITOR CHANGE	AUTOFILOT-BBUARE-A/B FILTER AND BERVOAMP	FAILURE MODE-OUT OF TOLERANCE. DING MAS OUT OFTOLERANCE, THIS AN UNSOLDERED INTERNAL CONNECTI THIS CAUSED INTERNAL BOLDER TO

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87.9TEM 84.8-87.9TEM	TEST/REPORT HUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	917E	PRI VENDOR HAME OTH YENDOR PART NO	plimate = que entre equ
						93180
CORRECTIVE ACTION-RAR A-98-D4-397 L INTERMAL RESISTOR CONNECTIONS. R. KS ON RESISTOR WIRE LEADS WHILE THUS. USE A 221 DEGREE C SOLDER AND BOLDER MACHINES. NO FINAL RESOLUT	TI OF ES OCT 1964 TAR A-98-04-397E GLEADS ARE BEIN QUALITY CONTROL TION OF THE PROBL	I REQUESTED THE VENDOR TO USE HIGH MELTING POINT CONNECTIONS FOR ALL OF 83 OCT 1964 REQUESTED QUALITY CONTROL PERSONNEL TO USE HEAT SIN 6 SCLDERED TO PRINTED BOARD CIRCUITS. THE VENDOR INDICATED THEY COADVISED THAT HEAT SINKS COLLD NOT BE USED WHEN SOLDERING MITH FLOW.	HIGH MELTIC	FERSONN FERSONN FE VENDOR	CONNECTIONS FOR AL EL TO USE MEAT SIN INDICATED THEY CO OLDERING MITH FLOM	
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	FTA8472/PE-4CO-03-250	COMPOSITE-B FACT	£500 640702	ETR	22	***************************************
URE HODE-FAIL TO OF MAINED GROUNDED AND	FAILURE HODE-FAIL TO OPERATE AT PRESCRIBED TIME, DUE TO LATE MANUAL EJECTION OF UMBILICAL P609, SERVO CANISTER IMPU TS REMAINED GROUNDED AND EMEINE RESPONSE TO THE ROLL PROGRAM MAS LATE.	NTE MANUAL EJECTION O	F WBILICAL	. 76091 .	ERVO CANISTER INPU	
EN EFFECT-INPROPER	SYSTEM EFFECT-IMPROPER AMALOG SIGNALS. ROLL PROGRAM GENERATED LATE.	אונט נאוני.				
WENICLE EFFECT-NOME.						
CORRECTIVE ACTION-NOVE.						
AUTOFILOT-SQUARE-A/B	LV-99-04-4838-F AMPLIFIER-CAPACITOR	FAR 27-41361-809	640626	FACTORY	YES TEXAS INSTRUME NO NT	993330
FAILURE NODE-ERRATIC OPERATION, S REPORTED FAILURE NAS NOT CONFIRMED BUTED TO CAPACITOR C-2, THE TANTAL! SULTING IN INTERNITTENT OPERATION,	FAILURE NODE-ERRATIC OPERATION, SERVO AMPLIFIER REPORTEDLY FAILED ECP 330,290.2 WITH NO VERHIER 2 YAW OUTPUT, THIS REPORTED FAILURE WAS NOT COMFIRMED. A FAILURE WAS FOUND, HOMEVER, IN VERNIER YAW I SERVOAMPLIFIER ASSY AND WAS ATTRI BUTED TO CAPACITOR C-2. THE TANTALUM SLUG IN THIS CAPACITOR WAS NOT FIRMLY SOLDERED TO THE CAPACITOR CASE THEREDY RESULTING IN INTERNITTENT OPERATION.	FAILED ECP 330.290. MEVER, IN VERNIER YA I WAS NOT FIRMLY SOLD	E WITH NO ' W 1 SERVOA! ERED TO TH	ÆRHER E ØLJFJER : CAPACIT	YAW OUIPUT. THES ASSY AND WAS ATTRE OR CASE THEREDY RE	After an an age of the specification of the specific
CCBRECTIVE ACTION-SURVEY INSTRUCT ALUM SAPACITORS CASE CODED BEFORE EPLACE CAPACITORS ALREADY ON CIRCI	CCRRECTIVE ACTION-SURVEY INSTRUCTION 55-64 WAS ISSUED 1 MAY 1964 TO LOCATE AND SCRAP ALL TEXAS INSTRUMENTS SYM TANT ALW SAPACITORS CASE CODED BEFORE 1962. IN REPLY, DESIGN GROUP EXPRESSED OFINION THAT IT WOULD NOT BE NECESSARY TO REPLACE CAPACITORS ALREADY ON CIRCUIT BOARDS AS PRODUCTION VIBRATION TESTS WILL DETECT ANY BAD CAPACITORS.	Y 1964 TO LOCATE AND COUP EXPRESSED OFINIC	SCRAP ALL N THAT IT I	TEXAS IN SCULD HOT BAD CAPA	ALL TEXAS INSTRUMENTS STM TANT IT WCALD NOT BE NECESSARY TO R ANY BAD CAPACITORS.	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAN	SLV-A8-D4-4843-F A/P BERVOAHPLIFIER	FAR 89-41000-5	\$406££	FACTORY	YES HO	995743
FAILURE MODE-OUT OF TOLERANCE-A/P REVEAL ANY DISCREPANCIES.	erance-a/p bervoamplifier reportedly had high yaw integrator gain. Extensive testing did not B.	Y HAD HIGH YAW INTEG	RATOR GAIN	EXTENSI	VE TESTING DID NOT	
CTIVE ACTION-NONE	CORRECTIVE ACTION-NOME SINCE FAILURE MAS NOT CONFIRMED.					
					PAGE 0400	- T-

FAILUME MODE-FAILED DURING OMERATION. THE MODULATOR ASSEMBLY REPORTEDLY PAILED WHEN A HO-OUTPUT INDICATION WAS INDICATED. CATED. EXTENSIVE ANALYSIS AND TESTING COAD NOT CONFIRM THE REPORTED DISCREPANCY. FURTHER INVESTIGATION DID NOT REVE AL ANY REASON FOR AN ERRONEOUS REJECTION.

SCHERAL AHICS CONVAIR DIVISION

11 Jun 1986

BIPPICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

#1#1EX #1#-#1EX	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE	DATE DIF	11ME 01F	PRI VENDOR MANE	
AUTOFILOT-BAURE-A/B FILTER AND SERVOAMF	A-A9-04-4807-F AMPLIFIER-CAPACITOR	FAR 87-41000-831	1100	FACTORY	3/09	• • • • • • • • • • • • • • • • • • • •
FAILUME MODE-OUT OF TOLE AINS, FAILUME WAS CAUSED	OF TOLERANCE. DURING CHECKOUT SEVERAL MAPCHE CARDS INDICATED MO-GO ON THE SUSTAINER PITCH STATIC CAUSED BY A NIZINSTALLED POLARIZED CAPACITOR ON THE SUSTAINER PITCH SERVOAMPLIFIER.	CHE CARDS INDICATED TOR OH THE SUSTAINER	MO-60 ON .	THE BUSTATH	CR PITCH STATIC &	
CORRECTIVE ACT; ON-HOME.	UNIT LAS MANUFACTURED THO YEARS PRICE TO THE FAILURE AND MAS AN INSPECTION OVERSIGHT.	IOR TO THE FAILURE A	NO WAS AN	INSPECTION	OVERSIGHT.	
AUTOPILOT-SQUARE-A/B	LV-99-04-4831-F DC AMPLIFIEN ASSY./TRANSISTOR	FAR E7-41350-017	640803	FACTORY YES	YES NO	63113
FAILURE MODE-FAIL DURING OPERATI FIRMED AND IS ATRIBUTED TO FRANS ANT APPRECIABLE LEARAGE OF ETHER 6 IN SATURATION OF THE AMPLIFIER.	04- THE BC 13- OR 6-3 8-8- 8-3	AMP ASSEMBLY FAILED EOM 330.280 PARAGRAPI B. THE REPORTED FAILURE WAS CON- With a lange reverse current learage. Cause of this is unknown. However. Or b-4 in this amplifier is magnified by the gath of each stage, resultin	CAUSE OF	THE REPORTED THIS IS UT	FAILURE MAS COM- WINDMN: HOMEVER:	
CORRECTIVE ACTION-SURVEY RE-SOUSTIVE TRANSISTORS VED FROM THE VENDRE ARE T 8340 RECOMMENDED USE OF 61MEERING REVIEW DOARD DU	CORECTIVE ACTION-SURVET INSTRUCTION (SI) 7-43 OF 15 FEB. 1963 WAS ISSUED MAICH CALLED FOR REMOVAL OF ALL TEMPERATU RE-SESSITIVE TRANSISTORS (ZAUNGA) IN BROCK, IN ALL CINCUIT FOARDS, AND 14 ALL TOP PRES. ALL ENDERA TRANSISTORS RECEI WED FROM THE VENCOR ARE TO BE TESTED TO LATEST REVISION OF ADDENOUM OF RELIABILITY TEST REQUIREMENT (RTR) 4-513. TOP BSAD RECOMMENDED USE OF FAIRCHILD TRANSISTOR BISCES AS A REFLACEMENT FOR PAGEA AND ENGERA. THIS WAS REFECTED BY EN GINCERING REVIEW BOARD DUE TO COST AND INSUFFICIENT MEJECTION RATE OF SPERRY UNITS PURCHASEL SINCE AUG. 1864.	1963 WAS ISSUED PATC POARDS, AND TA ALL T ADDENDIM OF RELIABIL EFLACEMENT FOR PASES ON RATE OF SPERRY IN	H CALLED 1 OF PKGS. 1 ITY TEST F A AND ENSI	ISUED MATCH CALLED FOR REMOVAL OF ALL TE 114 ALL TOP PRES, A.L. ENDS9A TRAMSISTOR FELIABILLITY IEST REQUIREMENT (RTR) 4-5 FOR PAGEA AND ENGERAL, THIS WAS REJECTED SPERRY UNITS PURCHASEL SINCE AUG. 1864.	OF ALL TEMPERATU TRAMSISTORS RECEI (RTR) 4-515. TCP AS REJECTED BY EM AUG. 1964.	
AUTOFILOT-SQUARE-A/B FILIER AND SERVOAMP	A-Ay-04-4845-F Adri (F)ER	FAR E7-41000-831	1165	FACT 78T TE	7E3	\$\$00033
FAILUME MODE- FAIL DUMIN - 1 WACH THE VERNIEM 2 PT D 93 FAILED AND ZENEM DI TESTS THAT AN INTERNAL DE POMENT DANAGE.	FAILUME MODE- FAIL DUMING OPERATION, AJP SERVO AMPLIFIER REPORTEDLY FAILED DURING PERFORMANCE OF PROCEDURE 27-98403 - 1 WHEN THE YEARIER & PITCH CUIPUI INDICATED A NO-GO, TESTING OF THE DEFECTIVE AMPLIFIER REVEALED TRANSISTORS GE AM D 83 FAILED AND ZENER DICHE CA-E SHORT CIRCUITED. CAUSE OF THE SCHICORDUCTOR PAILUMES CAN ME CONCLUDED FROM SPECIAL TESTS THAT AN INTERNAL DEGRACATION OF TRANSISTOR GE OCCURRED, RESULTING IN A SHORT CIRCUIT AND LAUSING EXTENSIVE COMPANIES.	EPONTEDLY PAILED DUR ING OF THE DEFECTIVE THE SENTCONDUCTOR FA D, RESULTING IN A 9M	ING PERFORMANCE SERVING CONT. CIRCUIT	HANCE OF PI PECKELED BE CONCLE	POCEDURE 27-98463 FRANSISTORS OF AN SED FRON SMECIAL ING EXTENSIVE COM	
CORRECTIVE ACTION-MOME.	CORRECTIVE ACTION-MOME. EXACT CAUSE OF FAILURE MAS NOT RNOWN.	, .				
AUTOFILOT-BOURE-A/B	9F v-99-04-4442-P	FAR R7-41358-025	13507	FACTORY TE	YES 40/C	

	DIFFICULTIES REVIEW-AUTOFILOT STSTUM-AIRBORNE	TOFILOT SYST/2N-AIRBOR	¥				
STOTEN BUB-STRTEN	TEST/REPORT MUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART HUNGER	VEHICLE 1	117E	~ 1	PRE VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-NOW	CORRECTIVE ACTION-NOME, AS THE FAILURE MAS HOT CONFIRMED.						:
AUTOFILOT-SQUARE-A/B	E7-33EE TRAKSFORMER	UTP-PET ET-04178-5	940518 60/C	ų	# Q	YES A.C. ELECTRONI NO CS ACSOSS	*0110*
PATLUME WOE-SHORT- A MEN WAS SHORTED TOGETH , THIS WAS CAUSED BY M	FAILUME WIDE-SHORT- /ELECT./. DURING INSULATION RESISTANCE TEST, PARA. 4.5; BECOMDARY WINDINGS OF LOT 43 TEST SPECF WEN WAS SHORTED TOGETHER 611THG INSULATION RESISTANCE FAILUME BETHEEN BOTH BECOMDARY WINDINGS AND THE HOUNTING HEANS . THIS WAS CAUSED BY POOR WENDOR GUALITY AND PRODUCTION CONTROL.	E TEST, PARA. 4.5, NE UNE BETNEEN BOTH SECO HTROL.	CONDARY WINDING	9 4 4 6 6 4 4 4 6 6 4 4 4 6 6 6 6 6 6 6	2 7	65 TEST SPECI	
CORRECTIVE ACTION-PER OLVED BY VICE PRESIDEN N 72-44, REF' FR 854-8-	CORRECTIVE ACTION-PER J.R. DEMPSETS HEND RD HAY 1964, THE PROBLEH OF UNSATISFACTORY VENDOR PERFORMANCE IS BEING RES OLYED BY VICE PRESIDENT COMMITTEE AND CUSTOMER. PET LOT 83 WAS REJECTED AND RETURNED TO VENDOR PER SURVEY INSTRUCTIO N 72-64. RET' FR 654-2-304.	PROBLEM OF UNSATISFA WAS REJECTED AND RET	CTORY WENDOR	PERFOR NA PER	SURVE	IS BEING RES EY INSTRUCTIO	****
AUTOFILOT-SQUARE-A-B	EP-3364 TRANSFORMER	UTP-PET 27-04179-5	840418 60/C		4 6 0 A	YES A.C. ELECTRONI NO CS ACS693	601108
FAILURE MODE-OUT OF 34 surface has rouse and	PECIFICATION. DURING PARA, 4.8.A. OVERLOAD TEST, THE TEST SPECINENS NORMALLY SMOOTH AND SHINEY Foal in texture, these appearances indicate that the specimen was over-meated.	ERLOAD TEST, THE TEST INDICATE THAT THE SPE	SPECINENS W	PHALLY R-MCA TI	å i	TH AND SHINEY	
CORRECTIVE ACTION-TEST CONTINUED ON SAME TESTS REYEALED NO EVIDENCE OF FAILURE, TH OF THE TRANSFORMER, THE LOT WAS ACCEPTED.	CORECTIVE ACTION-TEST CONTINUED ON SAME SPECIMEN AND ADDITIONAL TESTS ON ANCTHER SPECIMEN FROM LOT SI. ADDITIONAL TESTS PEYCALED NO EVIDENCE OF FAILURE. THE OMLY EVIDENCE OF OVERHEATING WAS CHANCE IN APPEARANCE OF THE GUTER SHELL OF THE TRANSFORMER. THE LOT WAS ACCEPTED.	ITIONAL TEBTS ON ANCT	ACR BPECIMEN	FROM L	7. 7. #1.	. ABOITTOWAL	
AUTOFILOT-SALARE-A/B	SLY-99-04-4832-F OC AMPLIFIEN/TRANSISTOR	FAR 87-41358-811	640410 FAC	FACTORY	ž č		02150
FAILURE MODE-DRIFT, OF AMALYSIS COWFISHED TEMPTH URS ST ELEVENED TEMPTH EMSITINE TO LEARGE SATURES IS USUALLY THE	FAILURE MODE-DRIFT, OUTPUT WOLTAGE PEPORTEDLY DRIFTED OUT OF TOLERANCE WHILE TEATING AT ELEVATED TEMPERATURES, TEST AMALYSIS CONTINUED THE FAILURE AND ATTRIBUTED IT TO EXCESSIVE COLLECTOR LEARANCE IN TRANSISTOR 6-4. THE COMDITION OC CLUS AT ELEVATED TEMPERATURES AND ALLONG THE OUTPUT TO DRIFT, EXPERIENCE REVEALS THE AMPLIFIER CIRCUIT IS EXTREMELY EXESSITIVE IS UBUALLY THE REASON GIVEN FOR THE PAILURE.	OF TOLERANCE WHILE T BLVE COLLECTOR LEARAN FT. EXPERIENCE REVEAL MADEBLACY OF THE SPEC	ENTING AT ELE E IN THANSIS: B THE AMPLIFI IN SPECIFY	VATED OR 8-14 ER CIR	TENPE THE SAT	RATURES, TEST COMDITION OC IS EXTREMELY LLEVATED TEMP	
	The contract of property of the contract of th	Annual Age - (Calagory) and a second and a second annual	AND THE PROPERTY OF THE PROPER	1 1	4.4	The same of the sa	Afternoon to Con the formation

CCRRECTIVE ACTION-REDESIGN OF AMPLIFIER WAS REQUESTED STATING THAT ENSES, TRANSISTORS WERE TO BE REPLACED WITH A SP ECIAL LON-LEAKAGE UNIT. TOP 8340 WAS APPROVED AND COMPLETED DEC. 1984 RECHMENTING USE OF 813DRS TRANSISTOR IN A REP ONT TO 830, 830 INDICATED THEY WERE WITTING FOR ECP SUBHITTAL. A REQUEST TO FROCEED WITH PREPARATION OF AN ECP WAS 8 UDMITTED TO 8LV EMS. REVIEW. BOARD. THIS WAS REJECTED DUE TO THE COST ASPECT, THE FEW NUMBER OF MISSILES INVOLVED. A ND INSUFFICIENT REJECTION RATE OF SHERRY UNITS PURCHASED SINCE AUS. 1864.

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SENERAL DYNAMICE CONVAIR DIVISION

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18 Jun 1868	DIFFICULTER REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	I	ages problems o communication may determine the second of the	ŗ
\$737EX \$15-372EX	TEST/REPORT HUMBER FAILED COMPONENT HAME	DIF DATA BOURCE	VEHICLE AITE PRI DATE DIF TIME GIF OTH	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOPILOT-SQUARE-A/B	EV-3381 TRAMBFCAMER	UTP-PET EY-04160-5	640401 60/C	TES A.C. ELECTRONI NO CS 3484	
FAILURE MOSE-OPEN /ELEC SHOCK TEST: PARA: 4.7-A ON WAS MOT BOLDERED.	FAILURE MODE-OPEN ZELECTIZ. THERE WAS AN CPEN WINDING BETWEEN PINS 1 + Z OF THE TEST SPECIMEN FOLLOWING THE THE SHOCK TEST: PARA, 4,7,8, THIS MAS NOTED DURING ELECTRICAL CONTINUITY TEST: INVESTIGATION REVEALED THAT THE COMMECTION MODE MODERED.	THEEN PINS 1 + E OF THE CONTINUITY TEST. IN	+ E OF THE TEST SPECIMEN FOLLOWING THE THERMAL TEST, INVESTIGATION REVEALED THAT THE COMMECTI	ONING THE THERMAL THAT THE COMMECTI	
ORFECTIVE ACTION-BURY N. PREDICTION, VENCOR P CTION IS NOW REQUIRED	CORRECTIVE ACTION-SURVET TE-64 REJECTED ALL A.C. ELECTRONICS PARTS THAT MERE ON HOLD IN RECEIVING INSPECTION OR NOT IN PRODUCTION, VENOOR NOW PERFORMING 100 PERCENT INSPECTION OF ALL BOLDERED CONNECTIONS. ALSO 6D/A RESIDENT OPT INS PECTION IS NOW REQUIRED ON ALL P.O.S EFFECTIVE APPROXIMATELY I JUME 1964, REF' FR-654-R-234A.	MICS PARTS THAT MERE ! TON OF ALL SOLDERED C! TELY 1 JUNE 1864, REF!	THAT MERE ON HOLD IN RECEIVING BOLDERED CONNECTIONS. ALSO 607.1964, REF: FR-654-R-E34A.	INSPECTION OR NOT A RESIDENT OFF THE	
AUTOFILOT-SQUARE-A/B	LV-39-D4-4722F AMPLIFIER/CAPACITOR	FAR R7-41361-5	640310 FACTORY	7.E3	7.004.0
FALLURE MODE-ERRATIC OF INTERNATIONS ANSEDMENT THE CAPACITY NO THE AMODE. THE CAPACITY NO THE AMODE TO THE CAPACITY THE THE THE CAPACITY THE AMODE TO THE CAPACITY THE AMODE TO THE CAPACITY THE THE THE THE THE THE THE THE THE THE	FALLURE MODE-ERRATIC OPERATION. THE AMPLIFIER ASSEMBLY WAS REJECTED WHEN THE VERNIER E PITCH OUTPUT OF THE SERVOCAN MASTED WAS INTERHITTENT AFTER A TWO HOLM WARM UP. THE FALLURE WAS TRACED TO A DEFECTIVE CAPACITOR OF 11 THE AMPLIFIE R ASSEMBLY. THE CAPACITOR WAS A TEXAS INSTRUMENTS DRY TANTALUM TYPE SYM WHICH HAD A DEFECTIVE BOND BETWEEN THE CASE AND THE ANODE. THE CAPACITOR WAS MADE WHEN THE WENDOR USED FLUXIESS SOLDER PREFORMS. FLUX IS PRESENTLY USED IN SOLDE RING THE ANODE TO THE CAME.	MS REJECTED WHEN THE LLURE MAS TRACED TO A LILURE LINE TYPE SYM WHICH TO FLUXLESS SOLDER PRE	VERNIER E PITCH OUTP DEFECTIVE CAPACITOR . HAD A DEFECTIVE BOWD FORMS, FLUX IS PRESSE	UT OF THE SERVOCAN CLIN THE AMPLIFIE BETWEEN THE CASE NILY USED IN SOLDE	
CHRECTIVE ACTION BURN	CORRECTIVE ACTION-BURNEY INSTRUCTION 55-64 REDIONED CAPACITORS MADE HETH PLUKEESS PREFORMS FROM STOCK	CITOR'S MADE WITH PLUM	CAS PREFORMS TROS S.		-
AUTCHTLOT-SAUARE-A/B	A-99-04-4740F DICDE	FAR 87-19005-007	64031D FACTORY	YES TRANSITRON NO	
FAILURE HODE- UMEN ELEC BREAK BETUEEN THE EXTEN EMCY.	FAILURE HODE- UPEN ELECTRICAL. SIK UNITS NEME REJECTED FOR INDICATIONS OF ONTH CIRCUITS. FAILURE IS ATTRIBUTED TO A BREAK BETUEEN THE EXTENNAL LEAD AND THE LEAD ATTACHED TO THE CHINTAL. THIS WAS THE RESULT OF A MAHUFACTURING DEFICI MCY.	FOR THOICATIONS OF ONE O THE CHYSTAL, THIS NA	N CINCUITS, FAILURE S THE MESULT OF A MA	IS ATTRIBUTED TO A NUTACTURING DEFICE	
CORRECTIVE ACTION- NONE.	WOME. STODE NO LOWGER MAMPACTURED CURRENT DIODES USE A NEW METHOG OF ATTACHING THE LEAD TO THE THE BOADING PROBLEM.	URRENT DIODES USE A ME	N ICTHOS OF ATTACHIN	6 THE LEAD TO THE	t
AUTOFILOT-SQUARE-A/B FILTER AND SCRYOAMF	A-99-D4-4741F DC AMPLIFIEM TRANSISTOR	FAR 27-41358-803	640306 FACTORY	£ 9	
FAILURE MODE-OUT OF TO TO A HIGH AC AMPLIFIER (WERE REPORTED IN FAR M.)	PAILUME MODE-OUT OF TOLERANCE, UNIT REJECTED FOR EXCESSIVE HORSE LEVEL ON THE OUTPUT DE BISHAL. PAILUME ATTRIBUTED TO A HIGH AC AMPLIFIER GAIN DERIVED FROM HIGH GAIN TRANSIBTORB IN THE 8-8, 8-4, OR 4-8 POSITIONS. TWO BINILAR CASES MERE REPONTED IN FAR BLV- 86-04-4748F AND-4750F.	INE NOSEE LEWEL ON THE ISTORS IN THE 8-8, 8-4	COUTPUT DE BIGHAL. F.	AILUME ATTRIBUTED TWO BIHILAR CABES	
				PAGE GARS	

DIFFICULTIES REVIEW-AUTOFILOT BYSTEM-AINBORNE

GENERAL . ANICA CONVAIR DIVIBION

18 JUN 1866

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ATSTER AUS-ATSTER	TEST/PEPORT NUMBER FALLE COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE 3	SITE PRE	VEHICLE 31TE PRI VENDOR PART HAS	
CGARCCTVE ACTION-THE ' Y- AND, THE AMPLIFIER DE DECLICATION. THE PROBLEY	COMPECTIVE ACTION-THE TRANSISTOR SPECIFICATION WAS REVISED TO ALLOM SELECTION OF LOW GAIN UNITS FOR THIS APPLICATION ** AND, THE AMPLIFIER DESIGNS TO ELINIMATE THE ** AND, THE AMPLIFIER DESIGNS TO ELINIMATE THE OSCILLATION. THE PROBLEM HAS BEEN VIRTUALLY ELINIMATED BY USE OF A SPERRY HILITARY VERSION OF THE TRANSISTOR.	TO ALLOW BELECTION (UE OF ONE OF THE LAC E OF A SPERRY HILITY	OF LOW GAIN I F NETWORK RES	HIIS FOR HISTORS T OF THE TR	THIS APPLICATION O ELINIMATE THE AMSISTOR.	# 60 0
AUTOFILOT - SQUARE - AZB	NZ - 48 - 04 - 4783 F ANI-LIFER , 01006	FAR 27-41643~3	640224 FAC	FACTORY TES		*****
FAILURE WODE-OUT OF BPECIFICATION. BHORTED. CIRCUIT ANALYBIS INDICATED POWER WAS APPLIED. THE ABSENDET WAS CROSSECTIVE ACTION-MOME.	ECIFICATION. THE AMPLIFIER ASSEMBLY WAS REJECTED BECAUSE DIODES CRS, CRS, CRIS AND CRIS MERE IS INDICATED THEN SERVINED FROM THE CIRCUIT WHILE ASSENDET WAS REMOVED FROM THE CIRCUIT WHILE ASSENDET WAS RECEIVED WITH R-E AND RS MISSING. IT WAS SURMIZED THIS ACCOUNTED FOR THE FAILURE.	MS REJECTED BECAUSE INSEED IF RESISTON NI MISSING, IT WAS BUT	DICOES CRS, E MAS REHOYEE RMIZED THIS A	CRP. CRI	D AND CRIL WERE E CIRCUIT WHILE FOR THE PAILURE	
AUTOPILOT-SQUARE-A/B	LV-A4-04-4673-F AMPLIFIER	FAR 27-72563-1	350-D FAC	FACTORY NO	, 60/C	\$08180
FAILLINE HODE-OUT OF TOL. US ON HIMUS 0.23 VOLTS. CREPANY BOOD TER R PITCH	LERANCE. BCOSTET E PITCH MALL MAS OUT OF TOLERANCE BY E.D VOLTS MHEN THE EXPECTED VALUE IS PA FAILURE WAS NOT CONTINED WHEN USING FACTORY CHECKOUT EQUIPMENT. FAILURE MAS INCLATED TO DIS ACTUATUR. (SEE IR BYRIEE, FAR LY-AS-LA-ATOS FUR PRIMARY FAILURE).	OF TOLERANCE BY BLI FACTORY CHECKOUT EN MA-ATOB FUR PRIMARY	O VOLTS BEEN BUIPMENT, FAI FAILURED.	THE EXPE	CTED VALUE 15 PM	
COPPECTIVE ACTION-NONE	REQUIPED SINCE THERE WAS NO PAILURE IN THE AUTOPILOT SERVANDLIFIER.	IN THE AUTOPILOT SE	PHOMPHETER.	_		
AUTOFILOT-SQUARE-A/B	L V = 39 - O. C - 471.5F TRANSFORMER	FAR 27-04163-1	64021E FAC	PACTORY YES	YES AC ELECTRONICS NO ACSABO	*****
FAILURE HODE- FAIL DURING OPERAT SP-BOS. THE FAILURE WAS CAUSED BY E AT TERMINAL TWO MAS UNSOLDERED.	ING OPERATION. THE TRANSFERMER FAILED DURING TESTING OF THE NEXT ASSEMBLY, PART NUMBER 27-413 Caused by an umboldered internal Mire splice at terninal three, additionally, the Mire splic Hsoldered.	DURING TESTING OF '	THE WEXT ASSE. THREE, ADDI	HELV, PA	AT NUMBER E7-413 , THE WIRE SPLIC	
CORRECTIVE ACTION-ALL 1 RUCTION 72-64,	TRAMSFORMERS AND CHOKES MANUFACTURED BY AC ELECTRONICS MERE REMOVED FROM STOCK BY SURVEY INST	B* AC ELECTRONICS M	SAE REHOVED P	ROF STOC	R BY BURNEY INST	
AUTOFILOT-BEUARE-A/B FILTER AND BERYCAMF	LV-A8-04-4706-F	FAR 27-41000-651	## 0 # # AC	PACTORY NO	3/09	L
PAILURE MODE-OUT OF EXP MAINE MOVEMENT MAICH MAB MOVEMENT MAB APPROXIMAT	FAILURE MODE-OUT OF EXPECTED TEST VALUE. IT WAS REPORTED THAT THE BERVOAMPLIFIER GAVE AM UNEXPECTED BOSSTER 1 YAW E MEINE MOVEMENT MAICH WAS INDICATED BY TELEMETRY AND A SANDORN RECORDING AFTER PROSRAMMER RESET. THE PROGRAMMER RESET MOVEMENT MAS APPROXIMATELY +1 DEGREE HAXINIM FOR D.3 BECOND. ANALTSIS FOUND NO DISCREPANCIES WITH THE BERVOAMPLIFIE	AT THE BERYCAMPLIFII M RECORDING AFTER PI . AMALYSIB FOUND NO	ER GAVE AN UN ICSRAMMER RES DIBCREPANCIE	EXPECTED ICT. THE IS MITH (ROSSTER 1 TAN E PLOCRAHICH RESET HE BENVOAMPLIFIE	
					PASE DASS	

SENERAL L. ANICE CONVAIR DIVISION

15 JUN 1966

9981 167 81	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	¥	
SYSTEM SUB-SYSTEM	TENTARPORT HUNGEN FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VENTCLE SITE PRI VENDOR NAME DATE OTH VENDOR PART NO	
R. IT WAS DETERMINED THA AND THE SEAUCHCE OF TEST CORRECTIVE ACTION-FINAL PROGRAMMER IS RESET.	THAT THE FAILURE STMPTON COULD BE EXTEST OPERATIONS USED ON THE HISSILE. SHAL CHECKOUT PERSONNEL MERE INFORMED.	PECTED TO OCCUM DURING	THAT THE FAILURE STAPTON COULD BE EXPECTED TO OCCUR DURING TEI IS DUE TO THE CIRCUITRY SAVOL VED TEST CHERATIONS USED ON THE HISSILE. SHAL CHECKOUT PERSONNEL WERE INFORMED THAT THE FAILURE STAWTCH CAN BE EXPECTED TO OCCUR MHEN THE	:
AUTOFILGT-BRUARE-A/B	FR-SEASSE URASAL POMOR SUPPLY BOARD	CYP-8L7 R7-41784-3	640131 60/C YEB 60/C	:
FAILURE MODE- FAFL BURI 125 SECONDS DUE TO PINS	PAILURE MODE- FAIL DURING OFCRATION, DURING BLT M-AXIS TEME-VIBRATION, ALL ZERVO ANF O 123 SECONDS DUE TO FINS NO. 13 AND NO. 82 BEING BROKEN ON WALE COMMETON OF URABAS BUPP COOPERTING ACTIONLEYS PARE TO DERIVATED MARKS MARKEN WINGS AND INST FORM MAR APPROVED.	EME-VIBRATION, ALL SER MALE COMMESTOR OF URA	AERVO AMP GUYPUTA DROPPES TO ZERO FOR G. URABA1 BUPPLY BOARD. REFER TO FRR DAZA.	
AUTCHILOT-SQUARE-A/B	A-99-04-4629F AMPLIFIER VEHIER E VAN	FAR E7-41360	MANASO FACTORY YES 60/C	
FAILURE MODE-ERRATIC OFF WEANIER TWO YAW OUTPUT. CORRECTIVE ACTION-MOME.	PERATION. THE AMPLIFIES WAS REJECT.	ED BECAUSE THE SERVO A	FAILURE MODE-ERRATIC OPCRATION. THE ANTLIFIED WAS REJECTED BECAUSE THE SERVO ANTLIFIER PACKAGE HAD AN INTERNITER! THO YAW OUTPUT. CORRECTIVE ACTION-MOME, FAILURE NOT CONTINED.	
AUTOFILOT-SQUARE-A/B FILTER IND SERVOAM	34,V-A8-O4-4878-F AMPLIFIER, TRAMSISTOR	FAR 48-41000-1	MADIES FACTORY YES	***
FAILURE HADE- FAIL TO O AMALYSIS COMPIRHED THE PTHE FAILURE OF THE ASSOCIA	FAILURE HUDE- FAIL TO OPERATE. THE SERVOAMPLIFIER REPORTEDLY FAMILYSIS CONFIRMED THE FAILURE AND ATTRIBUTED IT TO TRANSISTOR THE MAIURE OF THIS BURNED-OPEN LEAD INDICATED IT WAS CAUSED BY E YESTING OF THE ASSOCIATED CIRCUITAT DID MOT REVEAL THE CAUSE.	EDLY FAILED TO PROVIDE 18TOR 83 (EIABB) WHOSE ED BY A DISCREPANCY SO CAUSE.	FAILURE HUDE- FAIL TO CHERATE. THE SERVOAMPLIFIER REPORTEDLY FAILED TO PROVIDE AN OUTPUT FOR THE SUSTAINER ENGINE. ANALYSIS COMPIRMED THE FAILURE AND ATTRIBUTED IT TO TRANSISTOR 63 (ENASS) MAGGE INTERNAL BASE LEAD NAS BUNNED OPEN. THE NATURE OF THIS BURNED-OPEN LEAD INDICATED IT WAS CAUSED BY A DISCREPANCY SOMENHERE ELSE. IN THE CIRCUIT. EXTENSIVE E TESTING OF THE ASSOCIATED CIRCUITAY DID NOT REVEAL THE CAUSE.	
AUTOFILOT - BELANCE - ACT	LV-89-04-4694-F CIRCUIT BOARD TRANSISTORS	FAR 87-41848-807	64D1ES FACTORY YES	
FAILURE MODE-OUT OF TOLI	ERANCE, THE B-C AMPLIFIER ASSEMBLIATION OF WOIDE B	F PAILED EGUIPHENY OPE ETHERN SORG TO S MC SH	TOLERANCE, THE D-C AMPLIFIER ASSEMBLY PAILED REUIPHENY OPERATIONS PROCEDURE 15G-1287 PARAGRAPH 6. THAT THE TOTAL AMPLITUDE OF MOISE BETHEN 10KC TO 1 MC SHALL NOT BE GREATER THAN 28 MY PEAK-TO	
			PASE 0487	

GENERAL DYNAMICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

					Section Assessment Control of the Co			ſ
SYSTEM SG-SYSTEM	TEST/REP.	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOTACE PART NUPSER		\$17E	- 0 - 1 - 1 - 1	VEHICLE SITE PRI VENDOR PART NO	
-FEAR. THIS D-C AMPLIFIER HAD 30 MY PEAR-TO- PEAR, ANALYSIS ATTRIBUTED THE HIGH-FREGUENCY OSCILLATION TO OVERALL HIS H A-C SAIN OF THE TRANSISTORS BI, BE, B3 AND B4, REBULTING IN INTERSTAGE BAING THICE THAT OF A MOM-COCILLATING AMPLI FIER.	THIS D-C AMPLIFIER HAD 30 MY PEAR-TO- PEAK, ANALYSIS ATTRIBUTED THE HIGH-PREGUENCY OSCILLATION TO OVERALL HIS LAIN OF THE TRANSISTORS BI, BE, ES AND 84, REBULTING IN INTERSTAGE SAINS THICE THAT OF A MOM-COCILLATING AMPLI	O- PEAK, AMALYSIS, ND 94, RESULTING II	ATTRIBUTED THE H.	IGH-FREGUENCY	OF A NO	3 8	O OVERALL HIS	
CORRECTIVE ACTION-NOME.								
IUTOPILOT-SSUARE-A/B	LV-89-04-4650F AMPLIFIER CIRCUIT BOARD	7 BOARD	FAR 27-45510-1	640117	FACTORY	7EB 56/A NO	4/0	•
FAILURE MODE-OUT OF TULEBANCE, PITCH RATE ENITTER FOLLOMER AMPLIFIER OUTPUT WAS REPORTED DISTORTED. DISCREPANCY COU LD MOT DE DUPLICATED DURING ANALYSIS, A BAD SOLDER JOINT WAS FOUND BETWEEN TERHINAL S AND THE PRINTED CIRCUIT. AN OP EN CIRCUITED JOINT AT THIS JUNCTION OF THE COMPONENTS COUAD CAUSE THE REPORTED FAILURE.	YNERIANCE, PITCH RATE ENITTER FOLLONER AMPLIFIER OUTPUT WAS REPORTED DISTORTED. DISCREPANCY COUNTING AMALYSIS, A BAD SOLDER JOINT WAS FOUND BETNEEN TERHINAL S AND THE PRINTED CIRCUIT. AN OPTHIS JUNCTION OF THE COMPONENTS COULD CAUSE THE REPORTED FAILUME.	ENTTER FOLLOWER D SOLDER AS CONFORENTS COULD	AMPLIFIER OUTPUT FOUND BETWEEN TI CAUSE THE REPORTI	WAS REPORTED DRHIMAL 5 AND ED FAILUME.	DISTORTE	.5. 01 1750 C	SCREPANCY COU IRCUIT: AN OP	
CORFECTIVE ACTION- ND A MAS TAKEN ON OCTOBER #11	NO ACTICH WAS TAKEN AS A RESULT OF THIS AMALYSIS. BASED ON FAR NZ-99-D4-4435F CORRECTIVE ACTION I B. 1843 TO COMPLY WITH SPECIFICATION 0-780.3 REQUIRING JOINTS OF THIS TYPE BE SCADER.D FOR GOOD	A RESULT OF THIS SPECIFICATION 0-7	ANALYSIS. BASED (BOLS REGUIRING A	ON FAR NZ-99-	04-4439F ; TYPE BE	CORRE	CTIVE ACTION K.D FOR 6000	
NUTOPILOT-SQUARE-A78	LV-99- D4-4879-F CIRCUIT BOARD-FILTER	LTG8	FAR E7-41359-805	1350	FACTORY	ž 9		:
FAILURE HODE-ERRATIC OPERATION, AFTER FIVE HINNTES OF VIBHATION (DURING PRODUCTION VIBRATION TESTING) THE SUSTAINER YAM STAILC GAIN WAS ERRATIC AND MOULD FOT MALL THE MODULATOR-ASSEDBLY. FILTER WAS SUBJECTED TO EXTENSIVE TESTING WITHOUT VERIFYING THE REPORTED FAILURE, THE FOLLOWING CONDITIONS COLLD HAVE CAUSED THE FAILURE INDICATION-(1) CONTAMIN ATED PLUE OR ARMESS RECEPTACLE, (2) FOOR CABLE CONNECTION FROM TEST SET TO THE TEST SPECIMEN, AND (3) HISINTERPRETATION OF FROCEDURES.	OPERATION, AFTER FIVE MINUTES OF VIBRATION (DURING PRODUCTION VIBRATION TESTING) THE SUSTAINER DESTRUCT AND MOULD HOT MALL THE MODULATOR-ASSEMBLY. FILTER HAS SUDJECTED TO EXTENSIVE TESTING WI PORTED FAILURE, THE FOLLOWING COMDITIONS COULD HAVE CAUSED THE FAILURE INDICATION—(1) CONTAMIN ECCEPTACLE, (2) POOR CABLE CONNECTION PROM TEST SET TO THE TEST SPECIMEN, AND (3) MISINTERPRETA	AFTER FIVE HIMITES OF VIBHATION IDURING PRODUCTION VIBRATION TESTING) THE SUSTAINER MOULD FOT MALL THE WOULDTON-ASSEMBLY, FILTER WAS SUBJECTED TO EXTENSIVE TESTING WILLE, THE FOLLOWING CONDITIONS COULD HAVE CAUSED THE FAILURE INDICATION-(1) CONTAMING) POOR CABLE COMMECTION FROM TEST SET TO THE TEST SPECIMEN, AND (3) HISINTERPRETA	TION IDURING PRO R-ASSEMBLY, FILT NS COLLO MAYE CA ROM TEST BET TO	DUCTION VIBRA ER MAS SUBJEC USED THE FATL THE TEST SPEC	TION TEST	11NG) CTENSI CATTON	THE BUSTAINER VE TESTING WI -(1) CONTAIN HISINTERPRETA	
COMMECTIVE ACTION-WOME, FAILURE NOT CONFIRMED.	FAILURE NOT CONTE	PHCD.				***************************************	geirinis Absunitionis Tennis Anno Services	
ILTER AND SERVONME	LV-88-04-4389F CIRCUIT BOARD: TRANSFORMER	RANDFORMER	FAN 27-41000-851	189D \$40115	FACTORY	ş ş		
PAILURE MODE- ERRATIC O RY IN TRANSFORMER TE, P.	OPERATION. VERMIER ROLL OUTPUT WAS INTERMITTENT. THIS WAS DUE TO AN INTERMITTENTLY OPEN PRIMA P/n 87-04168-1: The Vermier Roll Modulator Circuit Board.	ROLL CUTPUT WAS IN WERNIER ROLL HODUL	STOR CIRCUIT BOA	MAS DUE TO A	N TE	TTENT	LY OPEN PRINA	
CORRECTIVE ACTION-NOME.	Baddenine er endemmiliere i manyfrær er et alle er i sterre							
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	DIFFICULTIES REVIEW-AUTOFILCY SYSTEM-AIRBORNE	HOFILCY SYSTEM-AIRBOX	341			í
BYSTEN BUE-SYSTEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART N. MBER	VEHICLE SITE	PR1	VENDOR HANE	
AUTOFILOT-SQUARE-A/B	LV-90-04-463EF FILIER, TRANSIBTOR	FAR 27-72565-1	2830 Z-ETR 640113	YE.	60/A	****
FAILURE MODE-ERRATIC OF ME AUTO PILOT PROGRAMMEL LEK FILTER.	PAILUME MODE-ERRATIC OPERATION. A TRANSIENT MOTION OF BOTH BOOSTER ENGINES IN THE PITCH CHANNEL OCCURRED WICHEVER T ME AUTO PILOT PROGRAMMER WAS RESET BEYOND 24 SECONDS, THIS WAS CAUSED BY A LEAKY ENGESA TRANSISTOR IN THE PITCH COMP LEK FILTER.	BOTH BOOSTER ENGINES IN THE PITCH CHANNEL. THIS MAS CAUSED BY A LEAKY ENSESA IRANSIST	THE PLICH CHANGE (Y RHSEBA FRANSE)	TOR IN	OCCURRED WHENEVER THE FITCH COMP	
CORRECTIVE ACTION-DESIGNMENT OR COMMERCIAL, TVI EM329A TRANSISTORS, MEI LED IN SERMO AMPLIFIERS	CORRECTIVE ACTION-DESIGN MEROSSS-30-75 DATED APRIL 21 1964; IN ANSWER TO RAR SLV-99-04-3656 STATED THAT THE LAST SH IPPERT OR COMMERCIAL TYPE ENSYS A TRANSISTORS WAS RECELVED LATE IN 1961, A STOCK INVENTORY DID NOT PEVEAL ANY OF THE ENSYSA TRANSISTORS. MEMO ALSO STATED THAT THE PRODUCTION VIBRATION TEST SMOALD DETECT DEFECTIVE 2NSYSA UNITS INSTAL LED IN SERVO AMPLIFIERS, SINCE .961 ONLY THE MILITARY VERSION OF ENSYSA HAVE BEEN PROCURED.	14, IN ANSWER TO RAR IN LATE IN 1961, A STOK VIBRATION TEST SHOUL!	LLV-99-04-3658 S' TR INVENTORY DID) DETECT DEFECTIVEN PROCUMED.	ATED THA NOT "EVE NE 2N329A	T THE LAST SH AL ANY OF THE UNITS INSTAL	
AUTOFILOT-SAUARE-A/B	LV-A9-04-4587 AMPLIFIER/TRANSIBTOR	FAR 27-41000-651	2500 FACTORY	# 2 A		*6154
FAILUME MODE- FAIL TO OMERATE, THE SERVO INE MAS COSEPVED, THE FAILURE WAS CAUSED : E TRANSISTOR WAS A RHOZPA DATE CODED EZE.	FAILUME MODE- FAIL TO OMERATE. THE SERVO CAM WAS REJECTED FROM MISSILE 250D BECAUSE NO ROLL MOMEMENT OF BOOSTER EMG INE WAS CISENYED. THE FAILURE WAS CAUSED BY A DEPECTIVE TRANSISTOR 03 IN THE ROLL DC AMPLIFIER, P/N 27-41643-403. TH E TRANSISTOR WAS A EMOZOA DATE CODED 222.	FROM MISSILE 2500 BI IANSISTOR 63 IN THE R	CCAUSE NO ROLL HE OLL DC AMPLIFIER	WEMENT OF	# BOOSTER ENG 41643-803. TH	
CORRECTIVE ACTION-MOME.	. SPERRY OF PROCEDURES IN EPPECT SINCE 1963 SHOULD PREVENT RECURRENCE OF THIS FAILURE.	HCE 1963 SHOULD PREVI	ENT RECURRENCE OF	THIS F.	J.Cue.	
AUTOFILOT-SQUARE-A/S FILTER AND SERVOAMP	LV-88-04-4594F FILTER	FAR 27-72565-5	640110 FACTORY	7 YES 60/C	3/0	08184
FAILURE MODE-OUT OF TOI CALIBRATION OF THE FILL	' TOLERANCE. THE SERVO CAN MAS REJECTED FOR HIGH PITCH STATIC GAIM. THE FAILURE MAS ATTRIBUTED TO FILTER NEAR THE UPPER LIMIT PLUS BUILD UP OF TULERANCES.	FOR HIGH PITCH STAT!	IC GAIN. THE PAIS	**	ATTRIBUTED TO	
CORRECTIVE ACTION-NOME.						
AUTOFILOT-SQUARE-A/B	LV-89-04-4642F CIRCUIT BOARD INDUCTOR/CHOKE	FAR 27-41645-5	640110 FACTORY	Y YES 60/A NO	٥/٨	
FAILURE HODE- FAIL DURI RATION HAS APPLIED, CAUI IN THE CHOKE WERE MOT I	L DURING OPERATION. THE PLUS ROLL OUTPUT OF THE MODULATOR ASSENDLY WOULD HOT HULL WHEN HEAT OR VIS. . CAUSE OF FAILURE WAS AN INTERNITIENT OPEN CIRCUIT IN CHOKE L-B. INTERNAL WINE SPLICE CONNECTIONS MOT SOLDERED.	OF THE MODULATOR ABI	MEMBLY MOULD HOT L-E. INTERNAL W.	NULL WE	HEAT OR VIB	
CORRECTIVE ACTION-PER R	CORRECTIVE ACTION-PER RAW LV-09-04-5005 THE BURNEY INSTRUCTION 46-60 WAS IBBUED APRIL 14, 1964 REGUIRING N-RAY FOR LL RY-04166-5 CHOKES IN STOCK, BURNEY IS IN MORK.	CTION 46-60 MM IBBU	D APRIL 14, 1964	RE-012	HA K-RAY FOR	
					PAGE DASS	1 - 1 - 1

GENERAL DYNAMICS

VENDOR NAKE	60/A 891494	E (CR-13, 1948 VIBRATION CAU FOR REWORK ARE.	6D/A 691653	NO MEAT BENS	60/0		60/A 891660	AFTER E-L/E HOURS WAR BY TEXAS INSTRUMENTS	NOVEMBER EG, 1963 FOR RADIOGRAPHIC IN REGURED X-RAY INSPECTION OF ANY SERIC JANUARY 4, 1984, ALL SUBJECT DIODES W	PAGE 0500
11ME DIF OTH	FACTORY YES 60/A	A CRACKED DIODE MACE IT PIGID. 1 MITS RETURNED FC	PACTORY YES	EST. CAUSE WAS	FACTORY YES		FACTORY YES	FILTER GAIN AND SATURATION TEST AFTER E-L/E HOURS WAS DIODE CR-12. DIODE MANUFACTURED BY TEXAS INSTRUMENTS	P9. 1963 FOR RU-RAY INSPECTION	
DATE DIF	£450 640109	S CAUSED BY GLASS DICOE. THAT BOARD U	44010E	MATURATION TO	1631631		631816	ND BATURATION DIODE MANUFA	OK NOVEMBER I	
DIF DATA BOURCE PART NUMBER	7AR R7-41330-5	E UMBALANCED. THIS WAS CAUSED BY L COATING AROUND THE GLASS DICDE MARY 6, 1964 STATED THAT BOARD (29-45C, ALL REWORK OR REPAIRS OF	D 601M6 INTO A MODULE FAR 87-41358-863	FIER FAILED A FILTER EN TO REDESIGN THE AH	FAR E7-41643-801	EPORTED LOK.	FAR E7-41358-811	LED THE FILTER GAIN A N ZENER DIODE CR-18.	BO'A ESTABLISHED A PROGRAM ON HOT HASTALLED. THE DIRECTIVE AND ON ANY PROJECT EFFECTIVE WERE PURGED FROM STOCK.	
FAILED COMPONENT NAME	A-88-D4-4663F CIRCUIT BOARD DICOL	FAILURE MUDE- OUT OF TOLERANCE, MODULATOR OUTPUT BECAME UMBALANCED. THIS WAS CAUSED BY A CRACKED DIGDE (CR-13, 1948) AI IN THE MODULATOR BRIDGE CIRCUIT, EXCESSIVE COMFORMAL COATING AROUND THE GLASS DIGDE MADE IT RIGID. VIBRATION CAUSED THE CRACK. CORRECTIVE ACTION-ANSWER TO RAR LW-99-D4-38ET DATED JAMMRY 6, 1964 STATED THAT BOARD UNITS RETURNED FOR REWORK ARE SUBJECTED TO THE NEW APPROVED COMPORNAL COATING PER HS 29-45C, ALL REWORK OR REPAIRS ON BOARDS ARE DONE IN THE BOND	ED AREA BY PROPERLY TRAINED PERSONNEL. ANY CIRCUIT BOARD GOING INTO A MODULE IS INSPECTED FOR ACCEPTABILITY INCLUDIN 6. VERIFICATION OF ACCOMPLISHING ANY SURVEY INSTRUCTIONS. UTOFILOT-SAURE-A/B A-99-D4-4849P ILTER AND SERVOANF AMPLIFIER, TRAMBISTOR 27-41358-863	TO OPERATE AT PRESCRIBED TINE, AMPLIFIER FAILED A FILTER BATURATION TEST, CAUSE WAS TWO MEAT SEMS (8-3 AND 6-4). RAR A-90-04-3839 NEGLESTED GD/A DESIGN TO REDESIGN THE AMPLIFIER ASSEMBLY.	LV-59-04-4633F AMPLIFIER ASSEMBLY	TOLERANCE, FILTER SATURATION WAS REPORTED LOW.	LV-89-04-4642F 8EATO AMPLIFIER DIGDE	FAILURE MODE-FAIL DURING OPERATION, BERVOAMPLIFIER FAILED THE FILTER GAIN AND SATURATION TEST M-UN, CONLO MAYE BEEN CAUSED BY BOLDER GLOBULES FOUND ON ZENER DIODE CR-1E, DIODE NAMFACTURED MAS NOT M-RAYED BY GD/A.	RAR LV-88-04-3878 (IN GD/A INVENTORY, DECEMBER 18, 1963, METALLIC PARTICLES	
	AUTOPILOT-SQUARE-A/S FILICR AND SERVOANP	8 - 56	ED AREA BY PROPERLY TRAIN 6 VERIFICATION OF ACCOMM AUTOFILOT-SAUARE-A/B FILTER AND SERVOAM	FAILURE HODE-FAIL TO OPE ITIVE ENGESA TRANSISTORS CORRECTIVE ACTION RAR A-	AUTOPILOY-SQUARE-A/B	FAILURE MODE-OUT OF TOLE CORRECTIVE ACTION-NOME.	AUTOPILOT-SQUARE-A/B	FAILURE MODE-FAIL DURING M-UP, CONLO HAVE BEEN CAL MAB NOT M-RAYED BY GD/A.	CORRECTIVE ACTION—IN REPLY TO SPECTION OF ALL BENICOHDUCTORS ONDUCTOR UBED ON CENTAUR AFTER SRE M-RAYED, AND THOSE SHOWINS	

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VENDOR NAME VENDOR PART NO	AC ELECTRONICE AC374 CODE E-3 5	HE BOOSTER 1 N THE BOOSTER RED AND MERE	CE TO INSURE CATED THAT TH		POSITION. THE		٥/٥	M AND PLUCTUA		YES BATTHEON NO	COSTER 1 PITC . THE ENITTER	
T O TH		HG WHEN T CONDARY O HOT BOLDE	IN PRACTI	RY YES	THE SO	÷	NY YES 60/C	14 MM LC			ER. THE BRANSISTON	1-64.
1F TIME 0	FACTORY	UITED SE	LES MAS	FACTORY	ISTATOR 1	NS TRUCTIO	FACTORY	ISTER G		PACTORY	CANISTI ENSEGA TI	UCTION &
VEHICLE DATE DIF	248D 631213	NG CHECKC OPEN-CIRC TRANSFORM	G TECHNIA TY COMTRO	931216	TENT TRAN EOH RN388	BURVEY I	631811	BERVO CAN		63120	IN A BERV RAYTHEON	VEY INSTR
DIF DATA BOUNCE PART NUMBER	FAR 27-04163-3	HPLIFIER FAILED DURI: TRANSCONER MITH AN C CONNECTIONS OF THE ATION.	TIGHT BURYEILLANCE OF SOLDERING COMBUCTED BY THE VENDORS QUALITY ACTION NAS CONSIDERED HECESSARY.	FAR E7-41558-805	CAUSE OF AN INTERNIT ANSISTOR MAS A RATTH	CHONED FROM BYOCK BY	777 77-41361-904	S REJECTED WIEN THE	·	# - # # # # # # # # # # # # # # # # # #	LED MAILE INSTALLED : USED BY A DEFECTIVE !	ED FROM STOCK BY SUR
TEST/REPORT HUMBER FAILED COMPONENT NAME	HZ-48-D4-4538 CIRCUIT BOARD, TRANSFORMER	FAILURE MODE-FAIL DURING OPERATION, THE AUTOPILOT SERVOAMPLIFIER FAILED DURING CHECKOUT TERTING WHEN THE BOOSTER I PITCH OUTPUT WOULD MOT HALL, THE FAILURE WAS CAUSED BY A TRANSFORMER WITH AN OPEN-CIRCUITED SECONDARY ON THE BOOSTER I PITCH SERVOAMPLIFIER CIRCUIT BOARD, SOME INTERNAL WITE CONNECTIONS OF THE TRANSFORMER WERE HOT SOLDERED AND WERE MAKING ONLY TOUCH CONTACT WHICH OPENED DURING HORMAL OPERATION.	CORRECTIVE ACTION-THE VENDOR STATED THAT VERY TIZHT SURVEILLANCE OF SOLDERING TECHNIQUES WAS IN PRACTICE TO INSURE FAILURES SUCH AS THIS WILL NOT RECUR. A SURVET CONDUCTED BY THE VENDORS QUALITY CONTROL DEPARTMENT INDICATED THAT TH IS APPEARED TO BE A RANDOM FAILURE. NO FURTHER ACTION MAS CONSIDERED HECESSARY.	LV-99-04-4599-F AMPLIFIER/TRANSIBTOR	FAILURE MODE- ERRATIC OFERATION, THE AMPLIFIER FAILED BECAUSE OF AN INTERMITTENT TRANSISTOR IN THE 93 POSITION, THE Transistor had a cracred collector-sade junction. The transistor has a rattheom ensess.	RAYTHEON ENGREA TRANSISTONS MERE REMOVED FROM STOCK BY SURVEY INSTRUCTION.	LV-89-GA-4654F AMPLIFIER, BERVO	OPERATION—THE AMPLIFIER ASSEMBLY HAS REJECTED WHEN THE SERVO CANISTER GAIN HAS LOW AND PLUCTUA	CORRECTIVE ACTION-HOME, FAILURE NOT CONTIRMED.	BLV-88-04-4622F AMPLIFIER: TRANSIBTOR	FAILURE MODE- FAIL DURING CPEZATION. THE SUBASSENGLY FAILED WHILE INSTALLED IN A SERVO CANISTER. THE SCORTER S PITC H STATIC GAIN SWITCH DID MOT PUNCTION. THE FAILURE MAS CAUSED BY A DEFECTIVE RAYTHEON ENSEAR TRANSISTOR. THE ENITTER LEAD WIRE MAS MOT SOMDED TO THE TRANSISTOR CHIP.	THEOM ENSESA TRANSISTORS WERE REMOVED FROM STOCK BY SURVEY INSTRUCTION 66-64.
8781EW \$UB-\$781ER	AUTOPILOT-SQUARE-AZE FILIER AND SERVOAMP	FAILURE MODE-FAIL DURI FITCH OUTPUT WOULD HOT I I FITCH SERVICH-LEFEEN MAKING ONLY TOUCH CONTA	CORRECTIVE ACTION-THE FAILURES SUCH AS THIS W IS APPEARED TO BE A RAM	AUTOFILOT-SQUARE-AZB	FAILURE MODE- ERRATIC I	CORRECTIVE ACTION-ALL	AUTOPILOT-SQUARE-A/B	FAILURE MODE-ERRATIC OF TED UNDER MILD BHOCK.	CORRECTL VE. ACTION-NOVE	AUTOFILOT - MQUARE-A/B	FAILURE MODE- FAIL DUR H STATIC GAIN SWITCH DII LEAD WIRE MAS NOT BONDI	CORRECTIVE ACTION-RATTS

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	DIPFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	IOPILOT BYSTEN-AIRBO			_
81878 818~872F	TEST/REPORT NINGER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	DATE DIF TIME DIF	SITE PRI VENDOR NAME TIME DIP OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B	A-09-04-4388-F TRANSFORMER	FAR 87-04138-1	\$31515 FACTORY	YES AC ELECTROMICS NO AC 3476	*******
FAILURE MODE-SHORT IEL GOC ELECTRONICS MANUFACORT MAS CAUSED BY PENETIESD. COMPRESSES NUTHIN CONTACT OF THE TWO WIN	FAILURE MODE-SHORT (ELECTRICAL), II TRANSFORMER (PART OF THE SERVOAMPLIFIER POWER SUPPLY) REPORTEDLY FAILED IN THE SECTRONICS MANUFACTURING OCCURRED. THE SH CALC ELECTRONICS MANUFACTURING OCCURRED. THE SH CALC CAUSED BY PERTRATION OF THE MYLAM THE SEPARATOR AND WIRE INSULATION AT A HIGH SPOT IN THE PRINARY PINTAL. COMPRESSION OF THE INSULATIONS AGAINS) THE HIGH SPOT WAS PRODUCED BY PRESSURE FROM THE OCCURRED. SECONDARY WIRES AND STRESSES WITHIN THE POTTING COMPOUND. UNDER THIS PRESSURE COLD FLOM OF THE INSULATION OCCURRED. RESULTING IN	THE SERVOAMPLIFIER PRINCENT AND WITHER PRINCHING WAS PRODUCED BY PRESERRE COLD FLOW OF	MER SUPPLY: REPORTI D. SECONDARY MINDIN KI A HIGH SPOT IN TI SURE FROM THY: OVER THE INSULATION OCC	EDLY FAILED IN THE SA OCCURRED. THE SH SH SH SH SH SH SH SH SH SH SH SH SH	
CORRECTIVE ACTION-AC E	ELECTRONICS HAS IMPROVED THEIR MAMOFACTURING TECHNIQUES IN ORDER TO ELINITATE THE DISCREPANCY	ACTURING TECHNIQUES	IN ORDER TO ELIMINA	TE THE DISCREPANCY.	
AUTOPILOT-SQUARE-A/B	A-99-04-4383-F CIRCULT BOARD CAPACITOR	#1.2 27-41359-801	SSF FACTORY	YES NO	26528
FAILURE MODE- FAIL DUR STATIC GAINS WOULD NOT E CPEN FESULTED RECAUSE TINNED LEAD WIRE.	FAILURE W.DE- FAIL DURING OFERATION. THE MODULATOR ASSEMBLY FAILED DURING VIBRATION TESTING WHEN THE SUSTAINER YAW STATIC GAINS WOULD NOT MULL. THE FAILURE WAS CAUSED BY AN INTERNITIENTLY OPEN CIRCUITED TANTALUM CAFACITOR (C-3). TH E OPEN RESULTED DECAUSE THE INTERHAL TANTALUM LEAD WIRE OF THE CAPACITOR DID NOT HAVE A SOLDER BOND TO THE EXTERNAL	LY FAILED DURING VIBI INTERNITEMELY OPEN TIRE CAPACITOR DID N	ATTON TESTING WEN LIRCUITED TANTALUM SI HAVE A SOLDER BO	THE BUSTAINER YAM CAFACITOR (C-S), TH NO TO THE EXTERNAL	
CORRECTIVE ACTION-THE HANUFACTURED PRIOR TO AN 1962 MENE SCRAPPED.	CORRECTIVE ACTION-THE VENDOR STATED THAT PRIOR TO 1962 FLUXLESS SOLDER PREFORMS WERE USED. THE FAILED C-FACITOR MAS HANUFACTURED PRIOR TO 1962, A SURVEY WAS CONDUCTED AND ALL TEXAS INSTRUMENT TANTALUM CAPACITORS CASE CODED OLDER TH H 1962 MEHE SCRAPPED.	UNLESN BOLDER PREFCRI L TEXAS INSTRUMENT T	43 WERE USED. THE F.	CASE COMED QUEER TH	
AUTOPILOT-SQUARE-AZB	LV-88-D4-4384-F SERVANPLIFIER/BE VAN-CAPACITOR	4-1-4-1-1-4-1-4-1-4-1-4-1-4-1-4-1-4-1-4	\$31112 FACTOR	YES NO	
FAILURE MODE- ERRATIC - AND VIGRATION SENSITIVE ENGLISE THERE M	FAILURE MODE- ERPITIC OPERATION. THE BERVOAMPLETIER ASSENDLY FAILED IN THE FACTORY WHEN IT MAS REPORTED TO BE HEAT AND VIGRATION SENSITIVE. PAILURE MAS CAUSED BY AN INTERHITEMILY CPEN-CIRCUITED JANTALUM CAPACITOR (C-11). THE OPEN R ESULTED RECAUSE THERE WAS NOT A FIRM BOLDER MOND BETWEEN THE FANTALUM BLUG AND THE CASE.	SLY FAILED IN THE FA TENTLY CPEN-CIRCUITE HE FANTALUM BLUG AND	TORY WHEN IT MAS P. JANTALUM CAPACITO THE CASE.	EPCRIED TO BE HEAT R (C-11. THE GYEN R	
CORRECTIVE ACTION- THE B NAMES TORED PRIOR TO HAN 1982 WERE BORAPPED.	CORRECTIVE ACTION- THE VENDOR STATED THAT PRIOR TO 1882 FLUNLESS SOLDER PREFORMS WERE USED. THE PAILED CAPACITOR MA I MANUFACTURED PRIOR TO 1962. A SURVEY MAN COMOUCTED AND ALL TEXAS INSTRUMENT TANTALUM CAPACITORS CASE CODED OLDER T IAN 1982 WERE SCRAPPED.	LUNCESS SOLDER PREFICI LL TEXAS INSTRUMENT	MS WERE USED. THE	FAILED CAPACITOR NA CANE CODED OLDER I	
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	The same of the sa	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORMS	OFILOT BYSTEN-AIRBO	J. 1				
	SYBIEN BUB-BYBTEN	TEST/REPORT HUMBER FAILED COMPOMENT NAME	DIF DATA BOUNCE	VEHICLE			VENDOR NAME	Γ
	AUTOFILOT-BRUARE-A/B FILTER AND BERYDAMP	FR-65AR686 CIRCUIT BCAND-CAPACITOR	CTP-PAT 61-84800-118	101160	50 /C		OTH VENDOR PART NO TES GUDENAN	9
	FAILURE MODE-ERRATIF OF ENT OPEN CIRCUIT CAULED EN TO FRE 047.	FAILUME MODE-ERRATIF OPERATION, DURING PAT TEMP-VIBRATION (Y-AKIS) SERVO AMP OUTPUT BECAME EMRATIC DUE TO INIERMITT EN TO FRE 047.	Y-AKIB) BERVO AMP O D FOIL OF CAPACITOR	UTPUT BECA ON BOARD	HE EHRAT	7 P	E 70 IN)ERMIT E7-41645). RE	-
	CCRECTIVE ACTION-PRODU TO SSG TO REVISE MAKE F. ES RESISTANCE.	-PRODUCTION COPS MODIFIED TO MONITOR OUTPUT CHANNEL CONTAINING CAPACITOR DURING PVT, ECP SUBHITTED MAKE FROM DRAWING TO INCLUDE SCREENING TESTS SUCH AS THERMAL BHOCK; COLD SOAK; AND EQUIVALENT SERI	T CHANNEL CONTAINING	F CAPACITO	P DURTNE		DURING PVI. ECP BLEMITTED SOAK, AND EQUIVALENI SERI	
	AUTOPICOT-BOURRE-A/B FILTER AND SERVOANE	A-90-04-4560-F TAM DC AMMIFIER ASSEMBLY/TRANSIST ET-41356-603 OR 4-E	FAR ET-41356-603	100F .	æ 5	1 Q		1332
	FAILURE MODE- OUT OF TO CUTMUTS WERE NOT BALANCED	OF TC ERANCE, THE AUTCRILOT SERVONMALIFIER FAILED DUSING MISSILE CHECKOUT WHEN THE BI AND BE YAW LANCED. THE FAILURE WAS CAUSED BY A HEAT-BENSITIVE OF TRANSISION IN THE YAM DC AMPLIFIER ASSEMBLY	FAILED DURING MISS. ENSITIVE OR TRANSIS	ILE CHECKO FOR IN THE	TAM DC	THE B	I AND BE YAW TER ASSEMBLY	
	CORRECTIVE ACTION-AN ECP THER ACTION WAS SUSPENDED	CORRECTIVE ACTION-AN ECP MAS PREPURED TO INCORPORATE A MORE RELIABLE REPLACEMENT TRANSISTOR FOR MER ACTION WAS SUSPENDED DECAUSE OF CONTRACT TERMINATION.	ELIABLE REPLACEMENT	TRAMS I STO	₹ 2 8	אַר אַר	SLV AUTOPILOTS, PUE	
	AUTOFILOT - SELARE - A - B FILTER AND SERVOAND	LV-9J-04-4564-F AMPLIFIER ASSEPBLY/TRANSISTOR 9-3 E	FAR 27-41643-803	\$31030 FA	FACTORY	ž č		068430
	FALLINE MODE-ERRATIC OPER BRATION TEST, FAILURE WAS TED RECAUSE OF INSUFFICIEN	FAILURE MODE-ERRATIC OPERATION. THE APPLIFIER ARREMBLY FAILED WHEN ITS OUTFUT BECAME ERRATIC DURING A PRODUCTION VI BRATION TEST, FAILURE WAS CAUSED ST AN INTERHITTENT OPEN IN THE EMITTER-TO-BASE CIRCUIT OF TRANSISTOR SS, THIS RESUL	WEN ITS OUTPUT BEC E EHITTER-TO-BASE CI O THE ENITTER JUNCTI	CAME ERRAT	IC DURIN		PODUCTION VI	
	- XOK.	THIS MAS THE FIRST KNOWN FAILURE OF THIS TYPE TRANSISTOR FROM THIS VENDOR.	IS TYPE TRANSISTOR	FRON THIS	VENDOR,			
•			11301-803	131029	T. O.	-		08888
	FAILURE MODE-OUT OF EXPECTED AS LOW DURING SYSTEM TESTS. THRELY !MDICATING THAT ANY OTHER	EXPECTED TRY VALUE, THE AUTOPILOT SERVOMPLIFIER WAS REJECTED AFTER THE BE PITCH STATIC GAIN WITERS. THIS REPORTED FAILURE WAS NOT COMPISHED A REPLACEMENT SERVOAMPLIFIER OPERATED SATISFACTO ANY OTHER AVSTEW DISCREPANCY WHICH CULLD MAVE CAUSED THE FAILURE MUST MAVE SEEN CORRECTED.	PLIFIER WAS REJECTED THED A REPLACEMENT OF THE CAUSED THE FAILS	AFTER THE MERVOAMFLE ME MUST N	E BE PIT	CORRECTOR STATES	NTIC GAIN W SATISFACTO	
	CLARECTIVE ACTION-NOME, THE	CLARECTIVE ACTION-NOME, THE CAUSE OF THE FAILURE ACTION						
ì	-	THE PAILURE COULD NOT BE L	CATED.					

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

STREM SUD-STREM	TEST/REPORT NUMBER DIF DATA SOURCE FAILED COMPONENT NAME PART NUMBER	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	SITE PRI VENDOR MANE	8
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	LV-AS-D4-45E4-F AUTOFILOT SERVOAMPLIFIER TRANSISTO 55-41000-803	FAR 55-41000-803	1350 FACTORY 631028	ORY YES WESTRAN	• • • • • • • • • • • • • • • • • • • •
FAILURE HODE-OUT OF SPECIFICATI SD CHECKOUT WHEN THE SUSTAINER (URE MAS CAUSED BY TRANSISTOR 41 E WAS CAUSED BY HOISTURE ACTING	FAILURE HODE-OUT OF SPECIFICATION. THE AUTOFILOT SERVOAMPLIFIER REPORTEDLY FAILED AT 60/C FACTORY DURING VEHICLE 13 5D CHECKOUT WHEN THE SUSTAINER AND VERHIER YAM OUTFUTS INDICATED EXCESSIVE VOLTAGE OVERSHOOTS DURING TESTS. THE FAIL URE WAS CAUSED BY TRANSISTOR 41 CHESTRAN CENIESE) AS ITS ENITTER-TO-BASE LEARAGE CURRENT WASOUT OF TOLERANCE. LEARAGE E WAS CAUSED BY MOISTURE ACTING ON THE INTERNAL ELEMENTS OF THE TRANSISTOR.	FIER REPORTEDLY FAI ATED EXCESSIVE VOLI TTER-TO-BASE LEARA THE TRANSIBTOR.	ILED AT CO/C FA TAGE OVERSHOOTS HE CURRENT WASO	CTORY DURING VEHICLE DURING TESTS. THE FA NJ OF TOLERANCE. LEAK	ره تا ده
CORRECTIVE ACTION-MESTRAN TRANS PRIOR TO DATE GED405; WESTRAN HUGHES (HA7534) TRANSISTORS.	AN TRANSISTORS WERE PURCED FROM STOCK AND MUCHES (MATSSA) TRANSISTORS WERE USED EXCLUSIVELY. Estran (eniese) transistors were considered acceptable altermates for the mormally utilized ors.	K AND HUGHES (MATS)	54) TRANSISTORS ALTERNATES FOR	NERE USED EXCLUSIVEL THE MORMALLY UTILIZE	÷ 0
FILTER AND SERVOAME SERVOAMELIFIER SERVOAMELIFIER FAILURE MODE-ERRATIC OPERATION. THE SUBTIR MULLING RESPONSE AT 0.1 SECONDS AFTER 8 D SUSTAINER ACTIVATION EVENTS TAKE PLACE. STSTEM EFFECT-ERRATIC OPERATION. VEHICLE EFFECT-COMPOSITE RE-SCHEDULED. 8 CORRECTIVE ACTION-REPLACED SERVO AMPLIFIE	03-1330/FC-CO-02-0308 FLIFIER THE SUSTAINER AND VER AFTER STAGING WHEN I E PLACE. OULED. SYSTEMS LEVEL AMPLIFIER PACKAGE.	-004 COMPOSITE-FACTORY 135D 631D26 HIER YAW FEEDBACK TRANSDUCERS IND HTEGRATOR INFLIGHT MALLING, GAIN AND COMPOSITE RETESTING REQUIRED.	135D 631026 631026 MG, GAIN CHANGE REQUIRED.	YES NO AN IRREGULAR INTEGRA E, VERNIER ACTIVATION	0 2
AUTOFILOT-BOUARE-A/B A-99-C FILTER AND SERVOAMF MODULA FAILUME MODE-OUT OF TOLERANCE. RE A HEGATIVE GAIN BETNEEN 2475 HE GAIN CAME MITHIN SPECIFICATION	UTOFILOT-SQUARE-A/B A-99-04-4500-F FAR 75F FACTORY NO ILTER AND SERVOAME MODULATOR ASSEMBLY CIRCUIT BOARD E7-41359-R01 631024 NO FAILURE MODE-OUT OF TOLERANCE, CIRCUIT BOARD TESTING REVEALED THAT THE MEGATIVE GAIN WAS 2473, SPECIFICATIONS REQUIRE A MEGATIVE GAIN BETNEEN 2475 AND 2525, SUBSEQUENT TESTING COMPIRMED THE FAILURE, MOJEVER, AS TESTING CONTINUED, THE GAIN CAME WITHIN SPECIFICATIONS, THE MODULATOR HAS THOROUGHLY EXAMINED AND NO DISCREPANCIES WERE FOUND.	FAR E7-41359-601 ED THAT THE REGATE F. CONFIRMED THE FAIL	75F FACT 631024 VE 641H WAS 241 LURE, HOLEVER, NO DISCREPANCIE	FACTORY NO NO REATS. SPECIFICATIONS RESU ER, AS TESTING CONTINUED, NCIES WERE FOUND.	10,10
CORRECTIVE ACTION-NO CORRECTIVA AUTOPILOT-SQUARE-A/S	MRECTIVE ACTION REQUIRED. LV-80-04-4487-F	PAR	Soos	25 5	8000
FILTER AND BERWOANP BERWO FILTER AND BERWOANP BERWO JI COMMECTOR. LEARAGE WAS CAUSE RIME INSTALLATION SECAUSE THE T CORRECTIVE ACTION-ASSEMBLY PER E CLOSELY EXAMINED FOR OBVIOUS	DAMPLIFIENO-RING DAY MITROCEM (USED FOR DOBY A DAMMED O-RING. I TORGUE FAINT AND LOCKWIRE ROMMEL WERE INFORMED OF DEFECTS AND SE REJECTED	CANISTER PRESSURIZATION) LEAKED T WAS ASSUMED THAT DAMAGE TO THE VERE INTACT, AND THE O-RING IS THE IMPORTANCE OF DAMAGE-FREE P IF DAMAGED, NOTE-SSOD WAS 187D.	STOEE SE TO THE O-RI PRING IS A STA RE-FREE FARTS A MS 1870.	D THE JAH- HUT ON THE NG OCCURRED BEFORE OR THE SEAL. HO THAT O-RINGS SHOUL	о с и
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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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THORT HUMBER DIF DATA SOURCE VEHICLE SITE PRI VENDOR NAME PART NUMBER DATE DIF THE DIF OTH TENDOR PART NO	-F FAR 831021 FACTORY NO 890788	FAILURE WOE-OUT OF TOLERANCE, THE MODULATOR ASSENDIT WAS REJECTED IN THE 60/C ELECTRONICS MANUFACTURING AREA WHEN, DURING WISHATION TESTING ON THE TOP PACKAGE SERVCHAMILITIER, THE BOOSTER IPITCH 1 + ROLL OUTPUT MOULD NOT MULL, FAILURE WAS ISOLATED TO CAPACITOR OF UNDER VIBRATION. CALIF, DIFFETOR, G.DIS UF, 100 VOLT, CODE 106 (60/C P/N 81-34800-113). The CAPACITOR WAS OPEN UNDER VIBRATION.	CORRECTIVE ACTION-GUDENAM CAPACITORS WITH CASE DIANGIZES OF D.31E SNCH AND SMALLER USED IN ASROPHE AND SOME GROUND EQUIPMENT, MITH CINE CODES OF 145 AND LOWER WERE REMOVED FROM STOCK, ECP 7599 ALLOWED USE OF GUDENAM CAPACITORS WITH HIGHER CASE CODES OF 148 AND HIGHER ON HEALY MANUFACTURED UNITS AND REPLACEMENT OF THESE TYPES IN BUSPECT SERVOAMPLIFIER PACKAGES, ALSO, SERVOAMPLIFIER PROCEDURE WAS MODIFIED TO INCLUDE A S MINUTE VIBRATION TEST TO CHECK FOR INTERMITTENC SES.	FFC-CO-03-0013-014 COMPOSITE-FACTONY 233D YES 60/C 889026 831017 NO RO RP-44335-3	OPERATE AT PRESCRIBED TIME, NO EMINE MONEMENTS IN THE PITCH AKIS MERE EVIDENT DUE TO A FAULTY ME.	,		ACRAGE WAS REPLACED.	FAR FAR 631017 FACTORY TES 888738 108-TRANSFORMER 27-44355-3	FAILURE MODE-FAIL DURING OPERATION, SERVOAMMULFIER WAS REJECTED LMER NO PITCH CHANNEL OUTPUT MAS OBSERVED DURING CO MPOSITE TESTING, TRANSFORMER T-E ON THE PITCH DEMOD-MOD-FILIEN CIRCUIT BOARD (P/N RT-41559-801) MAS FOUND SPLIT OFFM , THE PRIMARY MINDING MAS OPEN-CIRCUITED AND PART OF THE PRIMARY MAS SHORT-CIRCUITED TO THE SECONDARY, CAUSE OF FAIL UME MAS INSUFFICIENT IMPREGNATING RESSH IN THE WINDINGS.	CONRECTIVE ACTION-PROBLEM RECOGNIZED AND CORRECTIVE ACTION TAKEN BY SURVEYS SZN 115-NE AND 121-NE. ALSO SUPPLIERS N OM USE A COIL BODSIN WITH PERFORATED PLANGES TO ALLOW ENIRY OF THE IMPREMATING SERIN TO THE WINDINGS DURING VACUUM PAPEZGANTION MAGNET WIRE UNED ON MINDINGS S-4: 8-6: 7-8: AND 8-10 NAS CHANGED FIRCH SINGLE-COATED ISONAL TO DOUBLE-CO
TERT/REPORT HUMBER PAILED COMPONENT NAME	SLY-89-04-4301-F MODULATOR ASSEMBLY-CAPACITOR	OLERANCE, THE MODULATOR ASSEMING ON THE TOP PACKAGE SERVOR PACITOR C-1, GUDEMAN, CALIF, UMDER VIBRATION,	NH CAPACITORS WITH CASE DIA DES OF 143 AND LOWER WERE R HIGHES ON NEWLY MANUFACTURE MIFTER PROCEDURE WAS MODIFFE	AX63-0003-2330/FC-00-03-0013-014 8ER POAMP-1//IER	ERATE AT PRESCRIBED TIME, N	AMALOG STEMALS.	T RESONDAND.	SENVO AMPLIFIER PACKASE WAS REPLACED.	NZ-49-04-4445-F PITCH DENGMAATOR-TRANSFORMER	FAILURE MOE-FAIL DURING OPERATION. SERVOAMFLIFIER WAS MPOSITE TESTING. TRANSFORMER I'E ON THE PITCH DENCO-MOO. THE PRIMARY MINDING WAS OPEN-CIRCUITED AND PART OF THE UME WAS INSUFFICIENT IMPREMATING RESTN IN THE WINDINGS.	EM RECOGNIZED AND CORRECTIV PPERFORATED PLANGES TO ALL URED ON MINDINGS S-4: 6-6;
SYSTEM SUG-STSTEM	AUTOPILOT-SQUARE-:/B	FAILURE MODE-OUT OF TOLI DURING VIBRATION TESTIM URE WAS ISOLATED TO CAPA ME CAPACITOR WAS OPEN UN	CORRECTIVE ACTION-GLOEN EQUIPMENT, WITH CYSE CO H CASE CODES OF 148 AND I PACKAGES, ALSO, SERVOAMP IES.	AUTOFILOT-SQUARE-A/B	PATLIME MODE-FAIL TO OPE MENO-AMPLIFIER PACKAGE.	SYSTEM EFFECT-INFROMER ANALOG SIGNALS.	WHICLE EFFECT-COMPOSITE RESORDULED.	CORRECTIVE ACTION-THE M	AUTOFILOT-SQUARE-A/B	FAILURE MODE-FAIL DURIM MPOSITE TESTING, TRANSFOI , THE PRIMARY MINDING MAI UME MAS INSUFFICIENT IMP	CONNECTIVE ACTION-PROBLEM REOM USE A COLL BOBSIN WITH PER INFEGRATION NAMED WHEE UNCO ATES ISONEL.

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

9191EM 918-8191EM	TEST/REPORT NUMBER FAILED COMPONENT MANE	DIF DATA SOURCE PART MUMBER	VEHICLE DATE DIF	\$17E	PRI VENDOR NAME OTIS VENDOS PART NO	
AUTOPILOT-SQUARE-A/B FILTER AND SERVOANP	AX63-0003-1960/FC-CO-01-0006-005	COMPOSITE-PACTORY	1990		22	03060
FAILURE MODE-FAIL DURIN DE DETERNIMED DUE TO AN	FAILURE MODE-FAIL DURING OPERATION. UMNULLING OF THE PITCH AND YAW INTEGRATORS AT STAGING PLUS 10 SECONDS COULD NOT Be deternined due to an incompatibility between the 6/e and a/p (age) test tapes.	AND YAW INTEGRATORS D A/P (AGE) TEST TAP	. AT STAGIM Es.	PLUS 10	SECONDS COULD NOT	
STATEM EFFECT-IMPROPER AMALOS SIGNALS.	AMALOS BIGHALS.					
VEHICLE EFFECT-COUNTDOWN OR	AN OR COMPOSITE DELAYED OR RESCHEDULED-COMPOSITE RETEST WAS REQUIRED.	ED-COMPOSITE RETEST	WAS REQUIRE	ė		
CORRECTIVE ACTION-NOT R	CORRECTIVE ACTION-NOT KHOAN-GSE TEST TAPES MOST PROSABLY MERE REPUNCHED.	ERE REPUNCHED.				
AUTOPILOT-SQUARE-A/B	LV-98-04-4504-F Servanglifier	FAR 27-41000-651	2630	ETR	YES	991196
FAILURE MODE-ERRATIC OP ER 1 EMGINE FAILED TO RE TING FAILED TO REVEAL TH	FAILURE MODE-ERRATIC OPERATION. THE AUTOPILOT SERVOAMPLIFIER REPORTLY FAILED DURING VEHICLE CHECKOUT MHEN THE VERNI ER I ENGINE FAILED TO RESPOND TO CONTROL SIGNALS FOR 30 TO 40 SECONDS, THEN RESUMED PROPER OPERATION. SUBSEQUENT TES TING FAILED TO REVEAL THE CAUSE, AND THE FAILURE WAS NOT REPEATABLE.	ER REPORTLY FAILED D 40 SECONDS, THEN RES PEATOLE.	FAILED DURING VEHICLE CHECKOUT THEN RESUMED PROPER OPERATION.	LE CHECK(OPERATIO	NJ WEN THE VERNI N. SUBSEQUENT TES	
CORRECTIVE ACTION-THE FAILUR	CORRECTIVE ACTION-THE FAILURE WAS NOT CONFIRMED, HOMEVER: AS A PRECAUTIONARY MEASURE THE ASSOCIATED ACTUATOR ASSEMB Y MAS SENT TO SAN DIEGO FOR FAILURE ANALYSIS.	AS A PRECAUTIONARY H	EASURE THE	A\$\$0C1ATE	D ACTUATOR ASSENB	
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	FTA8234/P2-4CO-02-263	COMPOSITE-J FACT 27-85311-805	2630 11 630927 P	LUSETT.	7E3 7E3	788788
FAILURE HODE-FAIL DURING OPE 8 277.5 TO 427.7 SECONDS. DAT	RATION. MEASUREHENT A MAS NORMAL BEFORE	82600 VI YAM, INDICATED LOSS OF VI ENGINE POSITION CONTROL FROM PLU AND AFTER THIS INTERVAL.	F VI ENGINE	P081710	CONTROL FROM PLU	
SYSTEM EFFECT-ERRATIC OPERAT	PERATION.					
VEHICLE EFFECT-COMMANDS NOT	NOT RECEIVED OR BENT FROM 277.5 TO 427.7 SECONDS	4£7.7 \$£CONDS.				
CORRECTIVE ACTION-REPLACED	CED SERVO CANISTER AND ENGINE ACTUATOR.					
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	8F-88-04-4459-F BATTCH AND BURNING NETHORK	FAR 55-41007-3	1460	FACTORY	YES 60/C NO	993439
FAILURE MODE-OUT OF TOLE T OF TOLERANCE, THE NETH RE FOUND,	FAILURE MODE-OUT OF TOLERANCE. THE BAITCH-AND-BURMING NETWORK ASSEMELY WAS IR/D FOR A REPORTED PRE-STAGE K GAINS OU T OF TOLGRANCE. THE NETWORK ASSEMBLY WAS FUNCTIONALLY (ESTED BY LAB. AND FACTORY TEST EQUIPMENT. NO DISCREPANCIES NE RE FOUND.	JEK ASSEMELY WAS IR/	D FOR A REFY Y TEST EQUI	ORTED PRI	FOR A REPORTED PRE-STAGE K GAINS OU TEST EQUIPMENT, NO DISCREPANCIES ME	, — my s — mwy sawat y sp
CORRECTIVE ACTION-THE RE	CORRECTIVE ACTION-THE REPORTED PAILURE COULD NOT BE CONFIRMED AND NO CORRECTIVE ACTION TAKEN.	NED AND NO CORRECTIVE	E ACTION TA	ž		

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GENERAL DYNAMICS CONVAIR DIVISION

18 JUN 1966

STATICH AND SERVICE OF TOLERANDS HANGE TEST/REGORD HANGE TAST HANGES TAST HANGES TO BE TO BE THE STATE OF THE DIFF ON VEGOR HANGE LITTER AND SERVICES HAS SERVICED TO VIBRATION. THE DE AMPLIFIER REPORTED TAST TESTING PARTICLE OF THE TOTAL THE DE AMPLIFIER REPORTED TAST TESTING FRUIT HAS TESTING FOUNDED THAT A LAKE SOCIES BALL LOOPED TO VIBRATION TO VIBRATION TO VIBRATION SHALL TESTING FRUIT HAS TESTING FRUIT HAS THE TOTAL TO BE AMPLIFIER REPORTED TO VIBRATION SHALL TESTING FRUIT HAS TAST TO VIBRATION SHALL TESTING FRUIT HAS TAST TO VIBRATION SHALL TESTING FRUIT HAS TALKED TO VIBRATION SHALL TESTING FRUIT HAS TALKED TO VIBRATION SHALL TESTING FRUIT HAS TALKED TO VIBRATION SHALL TESTING FRUIT HAS TALKED TO VIBRATION SHALL TESTING FRUIT HAS TALKED TO VIBRATION SHALL THE SHALL THE HOLE OF TOLERANDS MANFACTURED MILL CONTAIN YEARD TESTING FRUIT HAS THE FOLICE FUNCTIONAL TEST HAS EARINED AND HOLE CASH THE LINE FOLICES HERE FUNCTIONAL TEST HAS EARINED AND FOLICE FUNCTIONAL TEST HAS EARINED BE LOW AND MON-LINEAR. CORRECTIVE AND SCHOOL TOTAL TALKED. A COMPLETE FUNCTIONAL TEST HAS PERFORMED ON THE UNIT, NO DISCREPANCIES WERE FOLICES WERE FUNCTIONAL TEST HAS EARINED AND FOLICE FUNCTIONAL TEST HAS EARINED AND FOLICE FUNCTIONAL TEST HAS EARINED AND FOLICE FUNCTIONAL TEST HAS FUNCTED TO MOSE CLEARLY DOTHER INTERNATOR GAIN CHARACTERS TO MOSE CLEARLY DOTHER INTERNATION GAIN CHARACTERS TO MOSE THE YEAR WHICH THE HYDRONIC FAIR THE HYDROLISM SCHOOL TO TOLERANDS. FAILURE MODE CONTOUR FUNCTION FROCEDURES MENE REVISED TO MOSE CLEARLY DOTHER INTERNATION GAIN CHARACTERS TO MOSE THE HAS THE STORMED THE BATCHER FOR THE MADO OFFER HYDROLISM SCHOOL TO TOLERANDS. FAILURE MODE CONTOUR FROM THE MADO OFFER HAS THE WINDOW SCHOOL TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD TO TOLERANDS. FAILURE WOLLD
LYZENGE DICOE 27-41358-803 \$308E4 NO LYZENGE DICOE 27-41358-803 \$308E4 NO LYZENGE DICOE 27-41358-803 \$308E4 NO E TO VIBRATION, SIGSEQUENT TESTING REVEALED THAT A LARGE SOLDER BALL LO ESICS; CAUSED THE DICOE TO SHCRET CIRCUIT WHENEVER THE UNIT WAS TILTED O ESICS; CAUSED THE DICOE TO SHCRET CIRCUIT WHENEVER THE UNIT WAS TILTED O ETHER PARTED. AND THOSE SHOWING METALLIC PARTICLES WERE PURGED INL CONTAIN X-RAYED ZENER DICOES. FAR E330 FACTORY YES 60/C E7-44533-3 \$308P3 NO EDICOEDURES WENE REVISED TO HORE CLEARLY DEFINE INTEGRATOR GAIN CHARACTER! CCEDURES WENE REVISED TO HORE CLEARLY DEFINE INTEGRATOR GAIN CHARACTER! FAR E322-D WIR YES 60/C E87-44335-3 \$308E3 NO HOSE CAUSENER HAND OVER IN YAW WHEN THE HYDRAULIC P ESTIGNA 63 AND 44 TO-BE SHORT CIRCUITED IN THE YAW SERVINGLIFFER.
IFICE REPORTEDLY FAILED DURING MANUFACTURING TEBTING, THE UNIT FOR VEHI E TO VIBRATION, SIGNEGACHT TESTING REVEALED THAT A LARGE SOLDER BALL LO BRICSI CAUSED THE DIODE TO BHOSE SHOWING METALLIC PARTICLES MERE PURGED HAL CONTAIN X-RAYED ZEMER DIODES. FAR E335-8 BROOFED TO BACTORY YES GOVE E7-44535-8 BROOFED TO BE LOM AND MON-LIMEAR. PRE UNIT, NO DISCREPANCIES WERE FOUND, NON-LIMEAR. FAR E352-D WIR THE GAIN CHARACTER IN THE WYDRAULIC P HAS INTO WHEN THE B-1 EMEINE MENT MAND OWER IN TAW WHEN THE WYDRAULIC P 151048 BS AND 84 TO BE SHORT CIRCUITED IN THE YAW SERVCAMPLIFIER.
HE STOCK WERE X-RAYED, AND THOSE SHOWING WETALLIC PARTICLES WERE PURCED RILL CONTAIN X-RAYED, AND THOSE SHOWING WETALLIC PARTICLES WERE PURCED RILL CONTAIN X-RAYED ZENER DIGOES. FAR E3530 FACTORY YES 60/C E7-44535-3 8300F3 HO B SUSTAINER YAW INTEGRATOR GAIN NAS REPORTED TO BE LOW AND MON-LINEAR. ME UNIT, NO DISCREPANCIES WERE FOUND. NON-LINEARITY WAS EXAMINED AND FOUNDER LINEAR REVISED TO MORE CLEARLY DEFINE INTEGRATOR GAIN CHARACTER! FAR E352-D WIR THE GOOD FOUNDER HAD OVER IN YAW WHEN THE HYDRAULIC PHONE ISTORS AND SAT TO-SE SHORT CIRCUITED IN THE YAW SERVONMELIFIES.PROGRAM.
FAR E330 FACTORY YES 60/C 27-44535-S 8308F3 HO R BUSTAINER YAW INTEGRATOR GAIN NAS REPORTED TO BE LOW AND NON-LINEAR. ME UNIT. NO DISCREPANCIES MERE FOLED. NON-LINEARITY WAS EXAMINED AND FO CCEDURES MERE REVISED TO MORE CLEARLY DEFINE INTEGRATOR GAIN CHARACTER! FAR E332-D WTR YES 60/C 18TOR E7-44535-S 6308ES HO 18TOR PROBAULIC P 18TORS 65 AND 64 TO-BE SHORT CIRCUITED IN THE YAW SERVCAMPLIFIES.PROSABS.
R BUSTAINER YAW INTEGRATOR GAIN ING REPORTED TO BE LOW AND NON-LINEAR. NE UNIT. NO DISCREPANCIES MERE PORTO. NON-LINEARITY WAS EXAMINED AND FO CCEDURES WERE REVISED TO MORE CLEARLY DEFINE INTEGRATOR GAIN CHARACTER! FAR 232-D WIR YES GO/C 1870R 27-44585-8 630883 NO WAS IR/D WHEN THE P-1 EMGINE MENT MAND OVER IN YAW WHEN THE MYDRAULIC P 1510RS 65 AND 64 TO-BE SHORT CIRCUITED IN THE YAW SERVONMELIFIER-PROGRAM.
CCEDURES MERE REVISED TO HORE CLEARLY DEFINE INTEGRATOR GAIN CHARACTER! FAR 232-D MTR YES GO/C 18TOR 27-44535-3 630923 NO WAS IR/D WICH THE B-1 EMEINE MENT HARD OVER IN YAW WHEN THE HYDRAULIC P 15TORS 63 AND 84 TO-18E SHORT CIRCUITED IN THE YAW SERVOAMELIFIER. PROBAS
FAR 232-D WTR YES 60/C SETCH 27-44535-3 650025 NO MAS 187D WHEN THE P-1 EMEINE MENT HARD OVER IN YAW WHEN THE HYDRAULIC P SETORS 65 AND 64 TO-SE SHORT CIRCUITED IN THE YAW SERVONMELIFIER-PROBARS.
MAS IR/D WIEN THE B-S EMEINE MENT HARD OVER IN YAM WHEN THE HYDHAULIC P.

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YES RAYTHEON HO FACTORY CORRECTIVE ACTION-PERSONNEL AT SITE NOTIFIED OF THIS FAILURE ANALYSIS. NO FURTHER ACTION TAREN. £330 €308£3 FAR 87-44535-3 MZ-AB-O4-4426-P YAW D-C AMPLIFIER TRANSISTOR AUTOFILOT-SQUARE-A/B

FAILURE MODE-ERRATIC OPERATION, DURING PAILURE AMALYBIS OF ANOTHER PROBLEM, THE YAW CHAMMEL DC AMPLIFIER EIMIBITED ERRATIC AND MOIST OPERATION, TRANSISTOR & IRATHEON EMSSEAS WAS FOUND TO BE SHOCK BENSITIVE, MICROSCOPIC EXAMINATIO M REVERLED A FRACTURE BETWEEN CRYSTAL AND THE EMITTER DOT.

COMPECTIVE ACTION-SIS RATTHEON TRANSISTORS MERE RETURNED TO RECEIVING INSTECTION AND N-RATED 101 TRANSISTORS OF THE

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GENERAL HICE CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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SITE PRI	ñ.	FACTORY NO	L RAINE FU	. G	DURING CI	7E3	5 Kg		A OF
VEHICLE &	THIS TYPE TRANSISTOR.	E330 FAC	EAR INTEGRAL CHECKING TH	43F MTR 63/1921	TO THE STOP	9 484	ER TRANSFOR		1265 36A 630818
DIF DATA BOUNCE V		FAR E7-44539-3 0	ATOR GAIN AND NON LIN GUT PROCEDURE. MAILE ALTBIB. ITERATOR CHARACTERIBT	FAR 27-41000-631 6	WHEN 1-1. MER 1-1. REQUESTED TO DIRECT T	*	COSTER E SERVOAMPLIFI H HINDS PITCH AND PAI		F4R 55-41000-803 6
TEST/REPORT NUMBER FAILED COMPONENT MAME	WERE IR/D (842807). STOCKS MERE COMPLETELY PURGED OF	NZ-A9-04-4488-F	FAILURE MODE-OUT OF TOLERANCE, SERVOANP IR/D FOR LOW INTEGRATOR GAIN AND MON LINEAR INTEGRAL RAMP FUNCTIONS. THE RE- ORTED FAILURE RESULTED FROM A MISUMOERSTANDING OF THE CHECKOUT PROCEDURE. MHILE CHECKING THIS REMORTED FAILURE A MO BY YAM D-C AMPLIFIER WAS IR/D (88643E) FOR AN ADDITIONAL ANALYSIS. CORRECTIVE ACTION-CHECKOUT PROCEDURE CHANGED TO CLEARIFY INTEGRATOR CHARACTERISTICS.	A-90-04-4419-F Bervohfelifier-transforner	FAILURE HODE- OUT OF TOLERANCE, THE SERVOAMMULFIER MAS IF/D MHEN BE ENGINE MENT TO THE STOP DURING COUNTDOMN, FAILURE MAS TRACED TO DEFECTIVE SOLDER JOINT AT PIN 1 OF TRANSFORMER 1-1. CORRECTIVE ACTION-INSPECTORS INFORMED OF THIS FAR AND MERE REQUESTED TO DIRECT THEIR PERSONNEL TO CHECK MUT CLOSEL T TO ASSUKE REQUIREMENTS FOR GOOD SOLDER JOINTS AND WERE	DASBO/OZ-604-DO-45 BZ FITCH SERVO AMPLIFIER TRANSFORM Z7-61065 ER	FAILURE MODE- FAIL DURING OPERATION. COLD BOLDER JOINT IN BOOGTER E BERNOAMFLIFIER TRANSFORMER MAS CAUSE OF FAILURE AVAICH EFFECT-ERRATIC OMFRATION. BOOGSTER E MENT MAND ONER IN HIMUS PITCH AND FAILED TO MALL.	Abortto.	CT-98-04-102-F BEX VGAMPLIFIER
SYSTEM BUB-SYSTEM	SINGLE POST DESIGN WERE	AUTOFILOT-SQUARE-A/B	FAILURE MODE-OUT OF TOLERANCE. PORTED FAILURE RESULTED FROM A 187 YAW D-C AMPLIFIER WAS 1870 CORRECTIVE ACTION-OMECKOUT PRO	AUTOPILOT-SQUARE-A/B	FAILURE HODE- OUT OF TOLERANCE, THE SERVE NEWS TRACED TO DEFECTIVE SOLDER JOINT A CORRECTIVE ACTION-INSPECTORS INFORMED OF T TO ASSUKE REQUIREMENTS FOR SOCIOUS	AUTOFILOT-SQUARE-A/B	FAILURE MODE- FAIL DURING avatem EFFECT-ERRATIC OFF	VEHICLE EFFECT-COUNTDOM ABOFTED.	AUTOFILOT-SAUARE-A/B

FAILURE MODE-ERRATIC OPERATION. THE BOLL INTEGRATOR EXHIBITED TRANSIENT RESPONSE AND MON LINEAR INTEGRATION ON THE SAMBOON RECORDING, DURING PERFORMACE OF PROCEDURE CTP-AP-DOIGC, THERE WAS NO DETECTABLE FAILURE OF THIS CANISTER. SINCE THE REPORTED FAILURE WORE WAS HEITHER ERIFIED NOR DUPLICATED, NO CONCLUSIONS CAN BE MADE AS TO THE PROBABLE CAUSE FOR REJECTION OF THIS AUTOFILDT BERMOANFLIFIER.

PA6E 0508

GENERAL L. ANICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTCHIOT STETEM-AIRBORNE

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	,						003455			1611191					
VEHICLE BITE PRI VENDOR MANE DATE DIF TIME DIF OTH VENDOR PART NO	ACULT BOARDS		LURE OF THE Y					AMPLIFIER HAD FULL H OF THE SHORT HAS THE	A RED BOT. H	2/0	OLERANCE. TLM FAILURE ANAL E.			į	
O TH	786 CE	ĝ	ME FAE				ž č	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S WITH	753 60/C	T.C.T.		ž č	COUMTD	
11 ME 011	MALIFIER,		EBULT OF 1				E E	. YAW DC A	METE HARKE OF THIS PA	E78	DECARES OF TALLES ON		נזפ	# DURING	
VEHICLE DATE DI	17 SERVOA 2430	420614	¥ 4 8 4 0				263D 63091.0	CONTROL.	DEVICES IVERIES	1970	7ED 0.5 ALSO CO WHEN 1885		1870 630625	TO REDLI	ġ
DIF DATA BOURCE	HINESS OF THIS AUTOFILE BERAPPED. COMPOSITE-S FACT	27-41000-851	TO ALL ENGINES OCCURRE	SOMALS WERE GENERATED.			FAR R7-41000-851	IR/O FOR NO YAM CHAMEL ANSITRON INEDSA) WAS BH	ERE X-RAYED-ACCEPTABLE AD IN AUG. 1963 ALL DEL	FAR 27-41000-851	BECAUSE B-1 YAW INDICA AND A SAMBORN RECONDER D CHECKED OUT MORMALLY	INE ACTION TAKEN.	COMPOSITE-J PACT E7-41000-851	HIPTED HEGATIVE ALNOST	MUL IN YAW/ROLL BHIFT
TENT/REPORT NUMBER FAILED COMPOMENT NAME	A FAILURE IN THE REPORTED MODE WERE BERAPPED. A FAILURE IN THE REPORTED MODE WERE SCRAPPED. AA83-0637/PE-4CO-01-863 COMPOSITE-# FACT 2630 12 YES	DC AMPLIFIED	FAILURE MODE-FAIL DURING OPERATION. LOSS OF YAW CONTROL TO ALL ENGINES OCCURRED AS A RESULT OF THE FAILURE OF THE W DC AMPLIFIER IN THE SERVO-AMPLIFIER.	STREM EFFECT-INFRCMER ANALOG SIGNALS. NO TAW CONTROL SIGNALS MERE GENERATED.	TE DELATED.	DTER REPLACED.	3P-9B-04-4454-F AMPL FTER-DIODE	TOLLAANCE, THE BERNOAMPLIFIER WAS 1870 FOR NO YAW CHAMMEL CONTROL. YAW DC AMPLIFIER HAD FULL N ALL THE TINE, ZENER DICDE CR-S (TRANSITRON INEDSA) WAS BHORTED. THE CAUSE OF THE SHORT WAS IMP THE PART OF THE DICDE MAMERACTIRE.	DIODES OF THIS TYPE PLUS SPARES WERE K-RAYED-ACCEPTABLE DEVICES WERE MARKED WITH A RED DOT. H GH CHANGE TO A BOLID PREFORMED LEAD IN AUG. 1983 ALL DELIVERIES OF THIS PART SINCE 27 NOV. 19 RICTION.	16-98-64-4410-F BERVO AMPLIFIER	PAILURE MODE- OUT OF TOLERANCE, SERVOANFLIFIER HAS IR/D BECAUSE B-1 YAW INDICATED D.S DEGREES OUT UF TOLERANCE. TLM ALSO INDICATED D.4 DEGREES OUT, A TEST PANEL MALL LIGHT AND A SANBORN RECONDER ALSO CONFIRMED FAILURE, FAILURE ANAL YSIS COULD NOT CONFIRM FAILURE. PACKAGE RESENT TO ETR AND CHECKED OUT NORMALLY WHEN INSTALLED ON MISSILE.	CORRECTIVE ACTION-PAILURE MAS NOT CONFIRMED. NO CORRECTIVE ACTION TAKEN.	P3-4C0-04-187	DOGSTER I EMEINE MUL IN YAM/ROLL BHIFTED HEGATIVE ALHOET TO REDLINE DURING COUNTDOMN.	IR AMALOG BIGMALD. BOOGTER I EMGINE MULL IN YAW/ROLL BHIFTED.
BYBIEN BUG-BYBIEN	وي	PILTER AND SERVOANP	FAILURE HODE-PAIL BURING OPERATION. LO AW DC AMPLIFIER IN THE SERVO-AMPLIFIER.	SYSTEM EFFECT-INPROPER	WENTCLE EFFECT-COMPOSITE DELATED.	CORRECTIVE ACTION-CANISTER REPLACED.	AUTOFILOT-SQUARE-A/B FILTER AND SERVOANF	PAILURE MODE" OUT OF TO EGATIVE CUIPUT SIGNAL AL ROPER MORKBANGHIF ON THE	CORRECTIVE ACTION-ALL DIODES OF AND ACTURER MADE A DESIGN CHANGE 83 ARE OF THE NEW CONSTRUCTION.	AUTOFILOT-SQUARE-A/B FILTER AND BERYCAMP	FAILURE MODE- OUT OF TOLERANCE. ALBO INDICATED D.4 DEGREES OUT. YSIS COULD NOT CONTINE FAILURE. F	CORRECTIVE ACTION-PAILU	AUTOPILOT-BOURE-A/B FILTER AND RERVAND	PATLINE MODE-DRIFT. BOD	STATEM EFFECT-IMPROPER

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SCHERAL DYNAMICS CONVAIR DIVISION

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		DITTICULIES REVIEW	THE RESIDENCE TO THE PROPERTY OF THE PROPERTY	94.		Ì		_
	STRIEN BUB-STATEN	TEST/REPORT MUMBER FAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	BITE PRI TIME DIF OTH	= X	VENDOR NAME VENDOR PART NO	· · · · · · · · · · · · · · · · · · ·
	VEMICLE EFFECT-NOME.	WENICLE EFFECT-MOME. CORRECTIVE ACTION-COMPLETED. COMPOSITE AS IS: THEN INVESTIGATE. SERVO WAS REPLACED.	EDTIGATE. BERNO WAS REP	ACED.				***
	AUTOFILOT-SEURE-A/B	LV-80-04-4420F	FAR 87-41000-637	\$500 \$30 622	5	2.3		52756
	FAILURE HODE-ORIFT, BOOD HAD HOT BEEN PERFORMED.	BODATEN 1 EMBING DRIFTED THREE BUARTERS OF	RTERS OF A DEGREE. THE CAN WAS REJECTED BECAUSE SURVEY 28-63	CAN MAB RE.	JECTOD BEC	AUSE	BURVEY 29-63	
	CORRECTIVE ACTION-NOME.	PAILURE NOT CONTINED.					enter de state de des de la companya de la companya de la companya de la companya de la companya de la company	
	AUTOFILOT-SQUARE-A/B FILTER AND SCRVOANF	A-JA-04-4412-F AJELFIER-CAPACITOR	FAR ET-41338	630420	FACTORY	2 8	YES GUDENAN NO	*****
	FAILURE MODE-ELECTRICAL E SOURCE OF THE DISCREMAN ACITCR (F/W 81-3490G-113)	FAILURE MOSE-ELECTRICAL OPEN. THE MODULATOR ASSEMBLY YAM CHANNEL WOLLD NOT MALL PROPERLY DURING PROD. VIB. E SOURCE OF THE DISCREPANCY WAS TRACED TO FILTER CAPACITOR C-1, FOUND TO HAVE AN INTERNITTENT OPEN CIRCUIT. ACITOR (P/N 81-34900-113) MADE BY GUDEMAN FAILED DUE TO LACK OF SUFFICIENT BOLDER.	AN CHAMMEL WOULD NOT MALL PI TOR C-1, FOUND TO HAVE AN 11 LACK OF SUFFICIENT BOLDER.	LL PROPERLY NA INTERNI	T DURING P	9 .	VIB. TEST. TH CUIT. THIS CAP	
	CORRECTIVE ACTION-SURVEY ADE TO DETERMINE IF A HIG ROCEDURES TO LOOK FOR INT	CORRECTIVE ACTION-SURVET INSTRUCTION 112-63 AND 9-64 REMOVED ALL SUSPECT CAPACITORS FROM DE TO OCTERNINE IF A MIGH PEL, CAPACITOR IS AVAILABLE AS REPLACEMENT, ALSO PVT TIME OF S OCEDURES TO LUGK FOR INTERHITIANT OFERATION.	EMOVED ALL BUSPECT CAPACAS REPLACEMENT, ALBO PV	CITORS FROM	HIMUTES	8.5	FROM STOCK. ALSO A SEARCH WAS HOT SHE POOF SHIMLTES WAS ADDED TO THE P	
	AUTOFILOT-SQUARE-A/B	A-A9-04-4400-F AMPLIFIER, TRANSISTOR	FAR E7-41500-831	113F 630620	FACTORY	7 G	YES MESTRAN	483073
	FAILURE HODE-OUT OF TOLE FAILURE HAS CONFIRMED DU ERMINED.	FAILLHE HODE-OUT OF TOLEMANCE. DURING FINAL MISSILE CHECKOUT, BOOSTER-I PITCH AMPLIFIEM R7-41381-803 HAD NO OUTPUT. FAILURE NAS CONFIRMED DUE TO LEAKY AND HEAT-SENSFIFWE TRANSTSTOR 8-E (CENIESE). CAUSE OF TRANSISTOR FAILURE NOT DET THEINED.	ECKOUT, BOOGTER-1 PITCH TRANS'BIOR 8-E (CRAIRUR	AMPLIFIER 1. CAUSE OF	R7-41361-	0 0 0	AAD NO OUTPUT. AILURE NOT DET	
	CORRECTIVE ACTION-60-C E , ALL OF THIS VENDORS TRA INSTALLED ON BOARDS WILL	CORRECTIVE ACTION-60-C ELIMINATED THIS VENDOR AS AN APPROVED SOURCE FOR CEMIESE TRANSISTORS (GD/C P/N 87-85800-068) ALL OF THIS VENDORS TRANSISTORS HERE PURGED FROM 8TOCK AND NEVER AGAIN USED ON CIRCUIT BOARDS. TRANSISTORS ALKEADY INSTALLED ON BOARDS WILL SE REMOVED UPON FAILURE.	PROVED BOUNCE FOR CENIE: K AND NEVER AGAIN USED	SE TRANSIS	TOR'S (GD/C	RANS	er-sseon-oss)	
	AUVOPILOT-SAUARE-A/B FILTER AND SERVOAMP	SP-99-04-4437-F CIRCUIT BOARD COMMECTOR	FAR E7-4[864-805	430407	PACTORY	YES 60/0	5/9	
	FAILURE MODE-OPEN (ELECT). THE BUITCH-AND- EN PINS IT AND 18, MICROSCOPIC EXAMINATION of Finns for their print Copper PLATING IS	PAILUME MODE-OPEN (ELECT). THE BUITCH-AND-BUMMING NETHORK ASBENBLY REPORTEBLY FAILED. THERE WAS NO CONTINUITY BETWE EN PINS 17 AND 18, MICROSCOPIC EXAMINATION BHOMED NO COPPER PLATING IN THE PRINTED-CIRCUIT BOARD HOLE FOR PIN 18. TH	ORK ASSEMBLY REPORTEDLY PPER PLATING IN THE PASS	FAILED. THE	FRE WAS T	2 mg	NTINUITY BETWE FOR PIN 16. TH	
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GENERAL ANICE CONVAIR DIVISION

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BIFFICULTIES KEVIEW-AUTOFILOT STREEM-AIRBORNE

	TEAT/REPORT NUMBER FAILED CONFORENT NAME	DIF DATA SOURCE PART NUMBER	DAYE DIF	#17E	TINE DIF OTH VENDOR PART NO	•
E DISCUSSE SINCE THE	LUME DISCUSSED WITH FACTORY AND PACKAGING PERSONNEL BUT NO EXPLANATION OFFERED REGARDING WAST	THE PERSONNEL BUT I	NO EXPLANAT	TON OFFE	RED REGARDING WHAT TAKEN AT THIB TIME	
NZ-99-04-4413F AHPL IF IER-TRAN	NZ-99-04-4413F AMP, IFIER-TRANSISTOR	FAN 27-41643-5	208D 630803	FACTORY	YES HO	***
PATION, THE MALYSIS FOL AL CURLING	OPERATION, THE DC ROLL AMPLIFIER WAS 18/0 FOR SLOPPY AND ERRATIC MULL AND APPEARED TO BE VIBRA HETAL CURLING FREE TO HOVE INSIDE THE CASE AND CAUSE INTERHITTANT SHORTS.	INTO FOR BLOPPT AND BE TRANSISTOR 84 12 CASE AND CAUSE INTO	ERRATIC M. Ensera). Di Erhittant B	ALL AND AL SASSEMBL HORTS.	PPEARED TO BE VIBA T OF THIS TRANSIST	40
ND RATTHEON	CORRECTIVE ACTION-GO/C AND RATHEON ARE EXAMINING MAYS TO IMPROVE GUALITY CONTROL. ALL K-RAY FILMS ARE MOM EXAMINED MITH 13 POMER MACHIFICATION ON A SHADOMGRAPH. THIS RESULTS IN PRECISE INTERPRETATION WITH REDUCED EYE FATIGUE.	IN PRECISE INTERPR	FROL. ALL PETATION WET	-RAY FILL H REDUCE	HS ARE HOW EXAMINE D EYE FATTGUE.	
A-A9-04-4374-F AMPLIFIER-INDUCTOR	4-F INDUCTOR	FAN 27-41000-831	455 630 703	FACTORY	TES 60/C NO	
RANCE. DURIN RE WAS COFFE OT BE FOUND.	FAILURE MODE-OUT OF TOLERANCE, DURING MISSILE COMPOSITE VERNIER I YAM/ROLL GAINS AT PLU ? OF SPECIFICATION, FAILURE MAS COMFIRMED DUE TO AN INTERMITTENT OPEN-CIRCUITED FILTER OF M-CIRCUITED CHOKE COALD NOT BE FOUND, NO EVIDENCE OF OMEDWEATING OR MISTAE WAS OBSERVED.	HIER 1 YAWROLL SA TIENT OPEN-CIRCUITE TING OR MISTAE WAR	INS AT PLUS OFFLIER CH CRSENVED.	ROLL BE	1 YAW/ROLL GAINS AT PLUS ROLL BIAS, DRIFTED HIGH OU OPEN-CIRCUITED FILTER CHOKE 27-04166-1, CAUSE UFOFF OR HIS/SE WAS OBSERVED.	3 W
MOOR ADVINED OF	ADVINED OF CHOKE FAILURE.					· -1
A-A8-04-4360-F	4-0	FAR 27-41000-831	456	PACTORY	7ES 60/C NO	40880
operation, pitch ailure annutsis bervamplifier,	OPERATION, PITCH BIGNAL WAS TRRATIC DURING THE FILL AND BLEED STATIC GAIN TEST, FAILURE NOT CO ALLURE ANLYSIS. MOST PROBABLE CAUSE OF FAILURE MAS POOR ELECTRICAL CORRECTION WHICH WAS CORRE	RING THE FILL AND O	BLECTRICAL	C GAIN TI	EST. PAILURE NOT C	0 4
CORRECTIVE ACTION-HOME, FAILURE NOT CONFIRMED.	COMPTRINED.					
AXES-0003-	AX83-0003-43F/FC-CO-01-0012-002 AMPLIFIER	COMPOST TE-FACTORY E7-41900-831	45 630		7E8 60/C 7E8	······································
FAILURE HODE-OUT OF TOLERANCE, LOW NE. WEATOR IN THE BERNO AMPLIFIER SACRAGE.	OCZRANCZ. LOM VERNIER NO. 5 ROLL GAINS MERE EVIDENT DUE TO LOM NEGATIVE GAIN PRON THE ROLL MOD PLIPIER JACKAGE.	HERE EVIDENT BUE	TO LOW HEEA	11 VE 94.1	N PRON THE ROLL NO	
	Adaman je na prima na najanje popularanje mata iz mata iz maja na najanje najanje maja najanje maja kanasa naj				PA&E 0311	T,

SENERAL DINAHICS CONVAIR DIVISION

PART NO	17674	THE SE EMS E	962301	ROLL &		447788			046188		PEC1 NE		IMPICAT IMBTAL
PRI VENDOR NAME OTH VENDOR PART NO		ED ERRATIC. OF THE PROB	7C\$ 60/C	TER 1 AND 2 ILOT BERYONA		YES NO			YES RATTHEON NO ENDESA		MALTBES ON E	7E 8 10	OUT OF SPEC IMBEQUATE
\$17E		ITCH APPEAR	× 15	D 188. BOOS	DOLATED.	FACTORY	воиен вт.		FACTORY	. 1E.R.	H PAILURE A	FACTORY	HANNEL VERE CRACKED BY
E VEHICLE DATE DIF	HOD ULATOR.	BUINED. TER NO. 1 PI RMIMG THE EX	1970	ARDS 164 AM OBSERVED II	E IMS NOT II	1260	ISTOR OL THE		430514	TOR AND ENE	Y TO PERFORE	1260	H THE YAW CO
DIF DATA SOURCE PART NUMBER	CAUSE OF FAULTY ROLL	BITE RETESTING WAS RETER REPLACEMENT, BOOS INAS AVAILABLE CONCE	FAR 27-41000-617	DS WERE RECEIVED ON C. EFECTABLE FAILUME WAS ANALTSIS.	HINCE CAUSE OF FAILUR	FAR 55-41007-8	COMECTIONS TO TRANS	INSPECTION.	FAR 87-85900-087	HORTED BETWEEN COLLEC	D SECAUSE OF INABILITY	FAR 55-41000-001	FUT RESISTOR VALUES I
TEST/REPORT HUMBER FAILED COMPONENT NAME	H TOO LOM. NOLL SAIMS TOO LOW BECAUSE OF FAULTY ROLL HODULATOR.	TE RESCHEDULED. SYSTEM AND COMPOSITE RETESTING MAS REBUIRED. O AUR. WAS REPLACED, MOMEVER, AFTER REPLACEMENT, BOOSTER NO. 1 PITCH APPEARED ERRATIC. THE SE D DEFETTIVE AND REPLACED, NO 1970 MAS AVAILABLE CONCERNING THE EXACT NATURE OF THE PROBLEMS E.		LERANCE. DURING MAPCHE, LOW NO-GOS WERE RECEIVED ON CARDS 164 AND 188. BOOSTER 1 AND 2 ROLL S D FAILURE WAS INTERNITTENT. NO DETECTABLE FAILURE WAS OBSERVED IN THE AUTCRILOT SERVOAMPLIFIE LURE WAS NOT ISOLATED BY FAILURE AMALTSIS.	CORRECTIVE ACTION-NO POSITIVE CORRECTIVE ACTION TAKEN SINCE CAUSE OF FAILURE MAS NOT ISOLATED.	3P-98-04-4901-E CIRCUIT BOARD	L OPEN. REJECTED FOR POOR BOLDER COMECTIONS TO TRANSISTOR OF THROUGH OF	. WORKHANSHIF ERROR CORRECTED BY INSPECTION.	NZ-99-04-43E3-C AMPLIFIER TRANSISTOR	L SHORT. TRANSISTOR REPORTEDLY SHORTED BETWEEN COLLECTOR AND ENLYTER.	. CAUSE OF FAILURE NOT DETERMINED BECAUSE OF INABILITY TO PERFORM FAILURE ANALYSIS ON SPECIME ADYERTENTLY SCRAPPED.	86-99-04-4265F RESISTOR	FAILURE MODE-OUT OF TOLERANCE. RATIO OF PEEDBACK TO INFUT RESISTOR VALUES IN THE YAW CHANNEL MERE OUT OF SPECIFICAT Son, The Failure has caused by a cracked resistor body. It was assumed the resistor has cracked by Imadeguate Instal Lation Procedure,
ATPTEM BUS-BTSTEM	SYSTEM EFFECT-OFERATION	VEHICLE EFFECT-COMPOSITY CORRECTIVE ACTION-SERVO	MCOUNTERED WITH THE MCCOMD UNIT. AUTOFILOT-SQUARE-A/B BP-8D-FILTER AND SERVOAME	FAILURE HODE-OUT OF TOLLEWING THE WAS SLOW AND R. PRINCOY CAUSE OF FAIL	CORRECTIVE ACTION-NO P	AUTOFILOT-SQUARE-A/B	FAILURE MODE-ELECTRICAL	CORRECTIVE ACTION-NOME.	AUTOFILOT - NAUMRE-A/B	FAILURE MOS-ELECTRICAL	CORECTIVE ACTION-WOME, CAUSE OF FAILURE NO M BECAUSE TRANSISTOR INADVERTENTLY BCRAPPED.	AUTOFILOT-BRUARE-A/B	FAILURE HODE-OUT OF TOL SON, THE PAILURE HAS CAU LATION PROCEDURE,

GENERAL . JAHICE CONVAIR BIVISION

18 JUN 1984

DIFFICULTIES MCVIEW-AUTOFILOT SYSTEM-AIRSONNE

BUB-8-81EH	· · · · ·	FAILED COMPONENT NAME	FART NUMBER	DA 16 014	DATE OFF TIME DIF	OTH VENDOR PART NO	
CORRECTIVE ACTION-1		COLLING AND HETHOD OF CONFORMAL COATING WERE IMPROVED.	OATING MENE IMPROVED.				*******
AUTOFILOT-SQUARE-A/B		A-A9-04-42 TOF TRANSFORMER	FAN 87-41000-831	110#	FACTORY	YE8 60/C	***
FAILURE MODE-PAIL TO OPERATE. THE I CAUSED ST OPERPRIMARY OF TRANSFORM R MERE SMORTED TOGETHER. PAILURE OF	TO OPER INVAT OF		ERNO CANISTER WAS REJECTED FOR NO OUTPUT IN VERNIER JAND 2 CHAMMELS. FA IN TE (2T-04164-1) IN ROLL MODULATOR. THE PRIMATY AND SECONDARY OF THE TI THE TRANSFORMER WAS ATTRIBUTED TO SHORTING OF TURNS IN THE TRANSFORMER.	IN VERNIER PRIHARY AND	SAND E CHI SECONDARI EN THE TRA	NWELS, FAILURE WA F OF THE TRANSFORM INSFORMER,	
COARECTIVE ACTION-NOME.		THE REASON FOR SHORTING OF TURNS IN THE TRANSFORMER WAS NOT LEARNED.	TURNS IN THE TRANSFORMER	HAS NOT LEA	RMED.		
AUTOFILOT-SQUARE-A/B		NP-99-04-4307-F AMPLIFIER/DIGDE	FAR 27-41361-605	1265	FACTORY	YES TEXAS INSTRUME NO NYS	801288
FAILURE MODE-ERRATIC OPERATION. DURING ER YAM/ROLL CHAMELS. FAILURE CONFIRMED	5 4		TEST IN FACTORY, EKCESSIVE MOISE (120MV) SHONED ON VERNIER 1 PITCH AND VERNI DUE TO NOIST ZEMER DIODE, DIODE HAD GROSS CASE LEAKSÚE.	SHV) SHOKED .	ON VERNIES EAKAGE.	1 1 PITCH AND YEAM	
CORRECTIVE ACTION-VENDOR		CONTACTED AND PLACED INCREASED EMPLANTS ON THE 100-PERCENT HERHETIC SEAL TEST.	ASED EMPASIS ON THE 100	-MERCENT HER	HETIC BEAU	. TEST.	1
AUTOFILOT-SQUARE-A/B FILTER AND SERVOANF	•	3P-99-04-4887 8MITCH 17	FAR R7-72572-1	1900	FACTORY	4E3 HO	******
FAILURE MODE- FAIL . PAILURE CAUSED BY		TO OPERATE. SMITCH 17 HAD HO QUIPUT OH BAFE BIDE BECAUSE OF OPEN DIODE CR-6 IN REMOTE SET MODULE BHORTIME SMITCH 17: BAFE BIDE TO GROUND: IN HISSILE WIRING HARNESS.	PUT ON BAPE BIDE BECAUSE GROMD, IN HISSILE WIRI	OF OPEN DIO	DE CR-6 10	4 REMOTE BET MODUL.	
CORRECTIVE ACTION	- SHORY 31	CORRECTIVE ACTION-SHORT IN HARNESS WAS RENOVED BY SITE PERSONNEL AT POINT ARGUELLO.	STE PERSONNEL AT POINT AL	seuerro.			
AUTOFILOT-BAUARE-A/B		CT-68-04-043F Bervanplifier	FAR 53-41000-801	1140	CT.	YE.B NO	01000
FAILURE MODE-ERRATION RE ATTRIBUTED TO TWO MOMENTARILY CAUSING	TIC OPER- NO LEAKIN	PAILUME MODE-ERRATIC OPEKATIOM. UNIT REJECTED FOR AM INTERMITTENT PULBE OUTPUT IN THE YAM INTERNATOR CHAMMEL. PAILU E ATTRIBUTED TO TWO LEAKING TRANSISTORS: 4-E AND 4-5: WHICH APPLIED A MEGATIVE VOLTAGE TO BOTH BIDES OF A CAPACITOR MOMENTABILY CAUSINS THE ERRATIC OPERATION:	N INTERNITTENT PALBE OUT 3. WHICH APPLIED A NEGAT	NUT IN THE Y	AM INTERK	NTOR CHANMEL. FAIL. IDES OF A CAPACITO	•
CORRECTIVE ACTION-A	TOUR THE	L. ENDESA TRANSISTERS HERE RETESTED AND REPLACED IF DEFECTIVE.	TED AND REPLACED 1F DEFE				
CONTROL INT. ACTION	-	re-e: Aris are-e-eren zon					_

GENERAL DYNAMICS COLTAIR DIVISION

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DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORNE

XULS AS	TEST/REPORT NUMBER	DIF DATA SOURCE	VEHICLE DATE DIF T	\$17E	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/6	8P-88-04-4304-F AWPLIFIER RESISTOR	FAR 87-41558-8		PACTORY	7£8	***
FAILURE HODE- OUT OF SPEC . CONFORMAL COATING POUND	F SPECIFICATION, RESISTOR R-11 REPORTED BURNED AND CRACKED IN DC AMPLIFIER. FAILURE MOT VERIFIED FOUND CRACKED BUT RESISTOR NOT DAMAGED AND MET SPECIFICATIONS.	BURNED AND CRACKED AND MET BPECIFICATION	IN DC AMPLI	7 . 231.7	ILURE NOT VERIFIED	
CORRECTIVE ACTION-PACTOR	CORRECTIVE ACTION-PACTORY NANAFACTURING PROCESS SPECIFICATION REVIEWED AND POUND ADEQUATE IN COVERING CONFORMAL COM	ION REVIEWED AND PO	MD ADEQUATE	IN COM	RING CONFORMAL COA	
AUTOFILOT-SQUARE-A/B	M7-89-04-4246F AWLIFIER	FAR 27-41558-605	630418	FACTORY	YE\$ 60/C NO	092940
FAILURE MODE-FAILED DURI: REMLACED AND CAN FUNCTIO	DURING CPERATION, BOORTER ONE PITCH PAILED TO MULL DURING TEST OF SERVO CAN. AMPLIFIER ASSY MAS	ILED TO MALL DURING	TEST OF 1631	VO CAN.	AMPLIFIER ASST MAS	
CORRECTIVE ACTION-NOME.	FAILURE MAS NOT CONTINED.					
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	A-99-04-4243F Filter	FAR 27-41359-601	630418	FACTORY	YES 60/C NO	102066
FAILURE MODE-OUT OF TOLE	TOLENANCE. FILTER SATURATION WAS BLIGHTLY LOW AFTER WARN UP.	TLY LOW APTER MARK	ķ			
CORRECTIVE ACTION-NOME.	PAILURE WAS NOT CONFIRMED.					
AUTOFILOT-SQUARE-A/8 FILTER AND BERVOAMP	BP-A9-G4-4243F TRANSFORMER MESISTORS	FAR E7-41000-851	1970	PACTORY	4E8	537361
FAILURE MODE-FAIL TO OPE H PRIMARY AND OTHER DANAC ISTORS IN THE RE AND RA P	FAILURE MODE-FAIL TO OPERATE, BERVO CANISTER MAJ REJECTED FOL NO OUTPUT FROM TAM CHANMEL, FAILURE NAS CAUSED BY OPE I PPINARY AND OTHER DANACE TO TRANSFORMER TE IN THE YAM MODULATOR RESULTING FROM INSTALLATION OF INCORRECT VALUE RES ISTORS IN THE RE AND RA POSITIONS.	FO. HO OUTPUT FROM ULATOR RESULTSME FR	TAN CHAMEL.	FAILUR	E MAS CAUSED BY OPE INCORRECT VALUE RES	
CORRECTIVE ACTION-NOME.	PACTORY PERSONNEL WERE INFORMED OF THE CAUSE OF THE PAILURE.	THE CAUSE OF THE F	ATLURE.			· · · · · · · · · · · · · · · · · · ·
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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

		VENDOR NAME	
		110	3 Q
		\$116 TIME DIF	FACTORY
	¥	VEHICLE DATE DIF	\$303E3 FACTORY YES
PAMICS NVISION	CPILOT SYSTEM-AIRBOR	DIF DATA SOURCE VEHICLE BITE PRI VENDOR MANE PARY NUMBER DATE DIF TIME DIF OTH VENDOR PART HO	17日間・春の町のマール 型
GENERAL DYNAMICS CONVAIR DIVISION	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORME	TEST/REPORT NUMBER FAILED COMPONENT NAME	AUTOPILOT-SQUARE-A/B SP-99-04-4528-C FILTER AND SERVOAMP FILTER-ELECTRICAL-TRANSFORMER
•		#3124 # # # # # # # # # # # # # # # # # # #	AUTOPILOT-BRUARE-A/B FILTER AND SERVOAMP

FAILURE MUDE-FAIL DURING OPERATION, FILTER ASSENDLY REMOVED DUE TO FAILURE OF TRANSFORMER T-2. BURSTITUTION OF FILT ER GAVE BATISFACTURE TOP PACKAGE OPERATION, SPECIMEN INADVERTENTLY REMORKED AND FAILURE ANALYBIB NOT PERFORMED.

CORPECTIVE, ACTION-MOME, CAUSE OF FAILURE NOT DETERMINED BECAUSE OF INABILITY TO PERFORM FAILURE ANALYSIS ON SPECIME

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5		6 8 6	
	TROSCOPE LAB	AT SMALL LEA	TEN TWO TRA
g g	HANGAR-J G TTRIBUTED	ICULT SO TH	ID OVER. FA
E E	LRE 134	CHECAT	N OFEN
1300	COUT PROCEDI	2 DIODE SPESI	ACTUATOR M
FAR 27-41000-843	FAILED DURING A CHECK L. ANALYSIS CONFIRMED	MG EITHER A REDESIGN ON OR REVISE THE ZENER FARE SS-41000-801	N THE BUSTAINER PITCH BLEBHCOTING, WAICH REI
HG-98-04-4192-P AMPLIFIER-ZENER BICDE	FAILURE MOCE-FAIL DURING OPERATION, THE SEPYOANFLIFIER PAILED DURING A CHECKOUT PROCEDURE 13 MANGAR-J GYROGCOPE LAB . THERE WAS NO INTEGRATOR GAIN CHANGE IN THE YAW CHANNEL, ANALYSIB CONFIRMED THE FAILURE AND FITRIBUTED 17 TO A LEAK Y ZENER DIODE (1M767).	CORRECTIVE ACTION-INITIATED RAR MC-98-04-3700 REQUESTING EITHER A REDESIGN OF THE PRESENT CIRCUIT SO THAT SMALL LEA RAGE OF THE ZENER DIODE WALL NOT AFFECT CIRCUIT OFERATION OR REVISE THE ZENER DIODE SPECIFICATION. UTOFILOT-SQUARE-A/P CT-38-04-049F ILTER AND SERVOAMP SERVOAMPLIFIER TRANSISTOR 35-41000-801 830319 NO NO	FAILURE MODE- FAII, DURING OPERATION. UNIT REJECTES IMEN THE SUSTAINER PITCH ACTUATOR WENT HAND OVEN. FAILURE ATTRIB Uted ic am external short circuit occurring during troubleahcoting, imich resulted in an offin and a short in two tra maistors.
AUTOFILOT-SQUARE-A/B	FAILURE MODE-FAIL DUR! . THERE WAS NO INTEGRA! Y ZEMER DIODE (1M761).	CORRECTIVE ACTION-INIT RAUE OF THE ZENER DIGON AUTOFILOT-SQUARE-A/P	FAILURE MODE- FAII, DUS UTED IC AM EXTERNAL SHA

FAILURE MODE-MOME. THIS UNIT WAS ERSONEOUSLY SENT BACK TO FAILURE ANALYSIS INSTEAD OF THE REWORK AREA AFTER IT WAS DISPOSITIONED FOR REMORK PER FAR A-88-04-4104F.

630358 FACTORY YES 6D/C

FAR 27-41385-5

CORRECTIVE ACTION-THOUBLESHOOTING PROCEDURES MENE CHANGED TO PREVENT RECUMENCE.

A-09-04-4272F AMPLIFIER

AUTOPILOT-SQUARE-A/B

CORRECTIVE ACTION-NOWE REQUIRED. PART ERRONGOUSLY SENT TO PAILURE ANALYSIS.

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GENERAL DINAMICS CONVAIR DIVISION

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

	0 0 0 0 0				5. P. P.				*00*			
VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR, PART NO	193D WIR YES GO/C 288630 630316 103 NO	STATHIN ENGINE COMPARTMENT, OR A 151C CAUSE OF FAILURE MAS ABNORMAL	NG LOSS OF PROPORTIONAL CONTROL. 13 SECS A/R CONTROL IN PITCH BECAN 110P TO BTOP PITCH MOVEMENTS OF 28	MIER ENGINES, MISSILE SELF DESTRU	1930 MTR NO GO/C 881335	72 SEC. PRIOR TO STAGING THE MOST STACH FAILURG. OTHER PO' SUE MODE TING FROM THE PREVIOUS FAILURG.		AN RAIL OF UNIV. ALL. RURILLY AN INTERNATIONAL MISSILE SELF-DESTRUCTED AN	1160 36A YE3 602608	BOOSTER & TRAVELED HARD OVER IN TAW, IN ADDITION, THERE WAS NO CO I PROBLEN MAS ATTRIBUTED TO AN EXTERNAL SHORT CIRCUIT OF THE AMPL PROBLEM WAS ATTRIBUTED TO A DEFECTIVE SOLDER JOINT AT THE COLLECT	PRECLUDE INADVERTENT SHORTS. QUA	PAGE 0317
DIF DATA SOURCE VEH	FLIGHT 1830	EITHER SHORTEU OR OPENED BOARDS OR COMPONENTS. BA	IR THAN BI PITCH INDICATI AT BOOSTER CUTOFF, AT SO NOTH BOOSTERS DEVELOPED S	DOM OF SUSTAINER AND VER HILES DOM RANGE.	FLICHT 1930	EGRAL SIGHAL OCCURRED O. PEATED BY THE PREVIOUS P IN MISSILE HARMEGS RESUL	3 3 4 6 6 6 7 7 7	JED MOSE-FLUMT AT MAK. T SUSTAINER AND VERHIER EN L& DOMN RANGE.	FAR 1160 53-41000-801 6303	E TRAVELED HARD OVER IN IN MAS ATTRIBUTED TO AN E MAS ATTRIBUTED TO A DEFE	PROCEDURES BE REVISED TO CALDER JOINT.	
TEST/REPORT NUMBER FAILED COMPONENT NAME	AOJ83-0049/A1-401-00-198 HARNESS-WIRING	FAILURE WODE-FAILED DURING OFENATION-FEEDBACK SIGNAL LEAD FITHER SHORTED OR OPENED WITHIN ENGINE COMPARTMENT, OR A SHORT OR OPEN CONDITION EXISTED IN THE CONNECTOR PINS, CRT BOARDS OR COMPONENTS, BASIC CAUSE OF FAILURE MAS ABNORMALLY HIGH TENP IN ENGINE COMPARTMENT,	SYSTEM EFFECY-ERRATIC OFERATION-BE FITCH TRAVEL WAS GREATER THAN BI PITCH INDICATING LOSS OF PROPERTIONAL CONTROL. BE EXHBITED A LARGE MASE LAS AND FAILED TO MALL PROPERLY AT BOOSTER CUTOFF, AT 103 SECS A/R COWINGL IN PITCH BECAM E OSCILLATORY WITH SUBSEQUENT LOSS OF PITCH ATTITUDE REF. BOTH BOOSTERS DEVELOPED STOP TO STOP PITCH MOVEMENTS OF 28 DEG/SEC FLOM LIMITING VELOCITIES.	VEHICLE EFFECT-LOSS OF VEHICLE STABILITY-RESULTED IN SHUTDOM OF SUSTAINER AND VERNIER ENGINES. MISSILE SELF DESTRUCTED AFTER 246 SEC AND TANK SECTION INFACTED APPROX 300 M. MILES DOMN RAWGE. CORRECTIVE ACTION-UNKNOWN.	AOJ 63-0049/A1-401-00-193 HARNESS-UIRING	FAILURE MODE-FAILED DURING OPERATION, LOSS OF ZERO YAN INTEGRAL SIGHAL OCCURRED 0.72 SEC. PRIOR TO STAGING THE MOST PROPABLE CAUSE IS VIBRATION AND ACCELERATION ENVIRONMENT CREATED BY THE PREVIOUS MITCH FAILURE, OTHER PC' SULE MODE . * FAILURE MERE A MALTURCTION OF GIVO SIG. AMP. OR BHORT IN MISSILE HARMESS RESULTING FROM THE PREVIOUS FAILURE.	AMALOG SIGNALS.	VEHICLE EFFECT-LOSS OF VEHICLE STABILITY, MISSILE ACCELERATED MOSENTIMH AT MAK, TAN MAKE, OF SULVEYORS, MORALIME AND VEHICLES OF 155 SECONDS AND PESULTED IN SHUTDOM OF SUSTAINER AND WERHER EMGINES, MISSILE SEIF-DESTRUCTED AF EACH SECS, AND TANK SECTION INWACTED APPROX, 300 M. MILLE DOMN RAPAE.	CT-98-04-0502 9ERVOAMLIFIER	ANCE, UNIT REJECTED WHEN VOA WELFTER, THE BOOSTER ECHOOTING, THE BOOSTER &	COMMENDED COMPLEX 36 TROUGLE SHOOTING PROCEDURES BE REVISED TO PRECLUDE INADVERTENT SHORTS. QUA	
S'STEN SUB-S'STEN	AUTOPILOT-SQUARE-A/B	FAILURE MODE-FAILED DURING OPERATE SHORT OR OPER CONDITION EXISTED IN LY HIGH TENP IN ENGINE COMPARTMENT.	SYSTEM EFFECT-ERRATIC OF BR. E.	VEHICLE EFFECT-LOSS OF VEHICLED AFFER 248 SEC AND TANK CORRECTIVE ACTION-UNKNOWN.	AUTOFILOT-SQUARE-AZB FILTER AND SERVOAMF	FAILIRE MCDE-FAILED DUR! PROPABLE CAUSE IS VIBRA S " FAILURE MERE A MALTU	SYSTEM EFFECT-IMPROMER ANALOG SIGNALS.	VEHICLE EFFECT-LOSS OF VEHICLE 110 DECREES BY 135 METER 248 SECS, AND TANK ME	CORRECTIVE ACTION-MOME. AUTOPILOT-SQUARE-A/B FILTER AND SERVOAM?	FAILURE MOE-OUT OF TOLER NIROL OF BOASTER 1 YAM SER IFIER OUTPUT DURING TROUBLE OR LEAD OF TRANSISTOR 4-E.	CORNECTIVE ACTION-RECOMM	

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRSORME

878 TEN	TEST/REPORT NUMBER	DIF DATA SOURCE	EHICLE	=	
6.4-173TEN	FAILED COMPONENT NAME	PART NUMBER	DATE DIF TIME DIF		
AUTOPILOT-BAUMRE-A/B FILTER AND BERVOAM	A-99-04-4380-F AWPLIFIER TRANSISTOR	FAR 27-41358-803	630313 PACTORY	7E8 NO	
PAILURE MODE-FAIL BURING OPERATIREMENTS TO TRANSISTOR (ENSAS). TRANSISTOR	FAILURE MODE-FAIL DURING OPERATION. AMPLIFIER MALFUNCTIONED AT HIGH TEMPERATURE. FAILURE CONFIRMED DUE TO FAULTY AS Transistor (ersas). Transistor had excessively high learage currents. Cause of transistor becoming leaky has not fo HD.	AT HIGH TEMPERATURE, FAILURE COMFIRMED DUE TO FAULTY CURRENTS. CAUSE OF TRANSISTOR BECOMING LEAKY WAS NOT	E. FAILURE COMFIRM TRANSISTOR BECOMI	ED DUE TO FAULTY AS NG LEAKY WAS NOT FO	
CORRECTIVE ACTION-RECEIVING INT COVERAGE TO DETECT LEAKAGE FOR THIS TIPE OF DISCREPANCY.	CORRECTIVE ACTION-RECEIVING INSPECTION TESTS FOR ENGAS TRANSISTORS WERE REVIEWED BY 60/C AND FOUND TO HAVE SUFFICIO OR THIS TYPE OF DISCREPANCY.	SISTORS HERE REVIEM ED AN EXTREHELY SMA	ED BY GO/C AND FOU	ND TO MAYE SUFFICIE	
AUTOFILOT-SQUARE-A/B FILTER AND SERVONOP	AX63-0003-135F/FC-CO-02-0011-031	COMPOSITE-FACTORY E7-41000-853	135F FACTORY 630308	YES TES	27.22
FAILURE MODE- FAIL TO CPERATE AT FLIGHT PROCRAIGER START PLU B BOTH FILTER SCAYCHMELIFIER A	AT PRESCRIBED TIME, THE PLUS S 125 SECONDS DID NOT OCCUR. ND PROGRAMMER WERE REPLACED.	OR MINUS SO DEGREE .	WERHIER PITCH BIAS PIHPOINTED BINCE	I OR MINUS SO DEGREE VERHIER PLICH BIAS FUNCTION EXPECTED CAUSE OF FAILURE NOT PIMPOINTED SINCE AVAILABLE DATA SHOW	
SYSTEM EFFECT-IMPROPER DISCRETI	DISCRETE SIGNAL- CHISSION OF VERNIER BIAS.	BÍAS.			
WENCLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE RE-SCHEDULED. BYSTEM AND COMPOSITE RETEST REQUIRED.	RETEST REQUIRED.			
CORPECTIVE ACTION-FILTER	CORPECTIVE ACTION-FILTER SERVOAMPLIFIER WAS REPLACED.				
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF	9F-99-04-4205-F 8HRD FILTER	FAR E7-43164-3	ZD1D FACTORY 630225	YES NO	097441
FAILURE HODE-OUT OF SPECIFICATI IN SHED SUB ASSEMBLY, BUT WAS TI TER FAILURE AMALYSIS.	FAILURE MODE-OUT OF SPECIFICATION OR TOLERANCE. OUTPUT WAS LOW. (SUBASSEMBLY NO.2), FAILURE COULD MOT BE CONFIRMED IN SHED SUB ASSEMBLY, BUT WAS TRACED TO GTRO SHRD FILTER, NEW FILTER ELIMINATED PROBLEM. SEE FAR 99-04-4181F FOR FIL TER FAILURE AMALYSIS.	low. (Bubasserbly in W Filter Eliminated	D.2). FAILURE COUL PROBLEM. SEE FAR	D HOT BE COMFIRMED 89-D4-4181F FOR FIL	
CORRECTIVE ACTION-SEE SA-	84-99-04-4181F FOR FILTER CORRECTIVE	ACTION.			
AUTOFILOT-SQUARE-A/B FILTER AND SERVOANF	A-99-04-4219F Amplifier/trans:87or	FAR E7-41350-803	430225 FACTORY	YES NO	888740
FAILURE MODE-OUT OF TOLERANCE. EMPERATURE SENSITIVITY OF TRANSI	AMPLIFIER WAS OUT OF STOR 61, AENDESA.	SPEC DURING 180 DEGREE F TEMPERATURE TEST. FAILURE WAS DUE TO	IMPERATURE IEST. F	ATLURE WAS DUE TO T	
CORRECTIVE ACTION-REVISION D	ON D OF EOF 330.230 PROVIDES FOR REPLACEMENT OF HEAT BENSITIVE ENSERA TRANSISTORS.	PLACEMENT OF HEAT BI	THSETTIVE BHSERA TR	ANSISTORE.	·
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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

PALIFE NO	50000		779780	D01710	DIATEL	997893	F. 14-1		KE PRO 896402	KAGE I ED BY ADER C		
PRI VENDOR HANG	YES 60/C	# 1 9	YES RAYTHEON NO ENSESA	EMITIES. A F AM AUTOPI T CIRCUITS.	AILURE IME	YES HUGHES NO HA7534	MPLIFIER CI TTER. A HOL		RESISTANCE PRO DUCTS	THE TOP PAC RATION CAUS D A POOR SO		
817E 71ME DIF	FACTORY Y	ING CAIN TE	FACTORY Y	TED BASE TO R CIRCUIT OF ERE NO BHOR	ERNING A F	PACTORY YI	OF A SERVOAL		FACTORY	TESTED IN HITTEHT OPEI F A VOID AM		
VEHICLE DATE DIF	6.7F	ERANCE DUN	2000 630206	D WAS SHOR' C AMPLIFIES L. THERE N	IT DATA COM	135F 630205	PLIFIER 2 (FROM COLLEG		630122	ITIVE MAEN TING INTER		
DIF DATA SOUNCE PART NUMBER	FAR R7-41645-5	BLIGHTLY OUT OF TO.	FAR 87-85900-027	TOR FAILED A TEST AN OPPORLY USED IN A D- COME FROM THE CRYSTA	L AVAILABLE PERTIIEH	FAR 87-93900-068	RANSISTOR, Q-E CF AN BE SHORT-CIRCUITED SERVED.		FAR 27-41363-901	SEMBLY WAS HEAT SENS PITCH CHANNEL EXHIBI PF THE END COMMECTOR		
TEST/REPORT HUMBER FAILED CONFOMENT MANE	H6-83-04-4157-F CIRCUIT SOARD	FAILUME MODE-OUT OF TOLERANCE. THE MODULATOR ASSEMBLY WAS SLIGHTLY OUT OF TOLERANCE DUNING GAIN TESTS. CORRECTIVE ACTION-THE MODULATOR ASSEMBLY WAS RECALIBRATED.	A-99-04-4156-F AMPLIFIER TRANSISTOR	FAILURE MODE-ELECTRICAL OFEN. IT WAS REPORTED THE TRANSISTOR FAILED A TEST AND WAS SHORTED BASE TO EMITTER. ADDITION MAL INFORMATION WAS UNDSTAINABLE. THE TRANSISTOR IS MOST COMMONLY USED IN A D-C AMPLIFIER CIRCUIT OF AN AUTOFILOT SE RYCANFLIFIER. AMALYEIS FOLAD THE EMITTER JUNCTION BROKEN LOOSE FROM THE CRYSTAL. THERE MERE NO SHORT CIRCUITS.	EFFORT WILL BE MADE TO FORWARD ALL AVAILABLE PERTINENT DATA CONCERNING A FAILURE IMPEDIATEL.	A-99-04-4155-F CIRCUIT BOARD TRANSISTOR	SHORT. IT WAS REPORTED THAT THE TRANSISTOR, G-E OF AMPLIFIER 2 OF A SERVOAMPLIFIER CIRCUIT AMALYSIS FOUND THE TRANSISTOR TO BE SHORT-CIRCUITED FROM COLLECTOR TO EMITTER. A HOLE IM-T THE OMLY PHYSICAL DISCREPANCY OBSERVED.		KZ-99-04-4148-F CIRCUIT BOARD/RESISTOR	FAILURE MODE-ERRATIC OPERATION. THE BUITCH AND BUMNING ABSENDLY WAS HEAT SENSITIVE WHEN TESTED IN THE TOP PACKAGE I In the factory checkout area, analysis found the booster e fitch channel exhibiting intermittent operation caused by An open of resistor R-10, the resistance wire was broken off the end comector because of a wold and a foor solder c Omection.		
2727EH 24 6 -2737EH	AUTOPILOT-BAUMRE-A/B FILTER AND BERVOMP	FAILURE MODE-OUT OF TOLERANCE. THE CORRECTIVE ACTION-THE MODULATOR A	AUTOFILOT-SQUARE-A/B FILTER AND SCRYOAND	FAILURE MODE-ELECTRICAL OFFN. 17 MAL INFORMATION WAS UNDSTAINABLE. RYCAMPLIFIER. AMLYRIS FOUND THE	CORRECTIVE ACTION-EVERY EFFORT WI	AUTOFILOT-SQUARE-A/B FILTER AND SERVOANF	FAILURE MODE-ELECTRICAL SHORT, IT BOARD, MAS LOW INFEDANCE, ANALYSIS HE COLLECTOR JUNCTION WAS THE ONLY	CORRECTIVE ACTION-NONE.	AUTOFILOT-SQUARE-A/B FILTER AND BERVOAM	FAILURE MODE-ERRATIC OPERATION. THE NET FACTORY CHECKOUT AREA. ANALYS AN OPEN OF RESISTCR R-10. THE RESISONMECTION.	CORRECTIVE ACTION-UNKNOWN.	

9901 107 81	DIFFICULTIES REVIEW-AUTOFILOT	PILOT SYSTEM-AIRBORNE	¥			
SYSTEM SUR-SYSTEM	TEST/REPORT HAMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	817E PRI 71ME D1F OTH	VENDOR MANE	
AUTOPILOT-SQUARE-A/B	NZ-89-04-4160-F CIRCUIT BOARD	FAR 27-41303-003	430122	FACTORY YES	3/9 3 1	3311
FAILURE MODE-FAIL DURING OPERATION, THE E TOP PACRAGE, THIS DISCREPANCY WAS NOT OF ACCUMULATION OF TOLERANCES MAY HAVE SACHOLY.	FAILURE MODE-FAIL DURING OPERATION, THE BWITCH AND BUMMING ABBENGLY WAS REPORTEDLY HEAT BENSITIVE WHEN TESTED IN TH TOP PACRACE, THIS DISCREPANCY WAS NOT VERIFIED DURING BUBASSENGLY TEST, THE DESIGN GROUP HENTIONED THE POSSIBILITY OF ACCUMULATION OF TOLERANCES MAY MAVE EXISTED BETWEEN THIS YAM BWITCH AND SUMMING ABSENGLY AND THE YAW MODULATOR A	ASSEMBLY WAS REPORT ASSEMBLY TEST. THE D YAW SWITCH AND SUM	EDLY HEAT EBICH GROW HING ABBEN	SENSITIVE WENTIONED	EN TESTED IN TH THE POSSIBILITY TAM MODULATOR A	
CORRECTIVE ACTION-HOME.						
AUTOPILOT-SAUARE-A/B	NZ-A9-D4-4066-F AMPL 1F 1ER	FAR 27-44535-3	3	FACTORY NO) 0 3	897766
FAILURE MODE-OUT OF TOLERANCE FLIGHT-CONTROL DESIGN GROUP IN OBLEN ONLY OCCURS DURING GROUN	:. YAW INTEGRATOR (REVEALED THAT THEY DO CHECKOUT OF THE	DCES NOT RESPOND PROPERLY TO GROUND SIGNAL WHEN POSITVELY-BIASED. THE NERE AWARE OF THE PROBLEM AND ASSURED FACTORY PERSONNEL THAT THIS PR A/P SYSTEM AND WILL NOT EFFECT FLIGHT PERFORMANCE.	UND SIGNAL SSURED FAC FLICHT PER	WHEN POSITY TORY PERSON!	ELTHAT THIS PR	
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME. FAILURE UNCOMFIRMED. THE PROBLEM EXISTS IN GROUND CHECK OUT ONLY AND WILL NOT OCCUR IN PLIG	(1918 IN GROUND CHEC	K OUT ONLY	AND WILL H	OF OCCUR IN PLIG	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF	AX63-003-1930/FC-CO-01-0013-007 SERVOAMLIFIER	COMPOSITE-FACTORY 27-44535-3	1930	PACTORY YES HO	5/ G 9 1	699206
FAILURE MODE-FAIL DURII	FAILURE MODE-FAIL DURING OPERATION-AFTER REMOVAL OF THE GYRO BIAS AT B SECONDS, THE BOOSTER ENGINE MULL TINE MAS EX ESSIVE.	IO BIAS AT & SECONDS	1 THE BOOS	TER ENGINE	KEL TINE WAS EX	Paragraph Street Suppliers (1988)
STATEM EFFECT-OPERATION TOO L	N 700 LOW6.					
VEHICLE EFFECT-COMPOSITY	WEHICLE EFFECT-COMPOSITE RE-SCHEDULED. COMPOSITE RETEST AND SYSTEM RETEST REQUIRED	BYSTEM RETEST REQU	IRED.			
CORRECTIVE ACTION-THE BERNO A	MERUD AMPLIFIER CANISTER WAS REPLACED.	•				
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	A-99-04-4125-F CIRCUIT BOARD/TRANSFORMER	FAR 27-04164-1	630118	FACTORY YES	THERMADOR TCS-25145	891506
FAILURE MODE-FAIL DURING OPER TORY ELECTRONIC CHECKOUT AREA.	ATION, THE TRANSFORMER B THE PRIMARY AND CHE OF	LURNED AND BURST DURING TESTING OF T THE SECONDARY WINDINGS BURNED OPEN.	STING OF THE		CIRCUIT BOARD IN THE FAC	and the later than the same from the same fr
CORRECTIVE ACTION-NOME, EXACT CAUSE OF TRAN AILURE WAS DUE TO EXTERNAL ELECTRICAL ABUSE.	, EXACT CAUSE OF TRANSFORMER FAILURE COULD NOT BE FOUND. HOMEVER, IT WAS INDICATED THAT THE	COULD NOT BE FOUND.	HOME VER,	IT WAS INDIC	ATED THAT THE P	
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	27.07.2		60 40 80 80		60	
PRI VENDOR NAME OTH VENDOR PART NO	STOR (ZNGZBA).	A TWO HOUR MARM U	ERLY DURING D-C	OHM RESISTANCE MEASUREMENT BETWEEN U 18.65 CHM, SHOULD BE 80 CHMS, PRIMAR	AINER AND VERHIE	PAGE 0522
	YES NO RANSI	4	T TES	15 A 3 U	SUSTI	
SITE TIME DIF	ETR SITIVE T	STED AFT	NOT MULL RETERHINE PALCE	ISTANCE !	FACTORY AUSE THE NG ANPLIF	
VEHICLE DATE DIF	630117 1ATURE SEN	WERE RETE	17 WOULD WAS NOT G 1570 620114		134F 630111 HINED BEC	
DIF DATA BOURCE PART NUMBER	FAR 88-41000-801 UT, CAUSED BY TEMPE	LL SERVO AMPLIFIERS FAR 27-41358-5	AT THE FACTORY WHEN HE CAUSE OF FAILURE FAR ER-41000-857	REJECTED FOR ELEVE TOR HADRESISTANCE O TE WAS NOT DETERHINE MATE INFREGNATION.	COMPOSITE-FACTORY 134F FACTORY HO 630111 HO 630111 HO E COULD HOT BE DETERMINED BECAUSE THE SUSTIUSE OF FAILURE MAS AGE MULING AMPLIFIER.	(A.E.
TEST/REPORT NUMBER FAILED COMPONENT NAME	TOPICOT-SQUARE-A/B SP-98-04-4067-F FAR 630117 ETR YES LIER AND SERVOAMP SERVO AMPLIFIER TRAMBISTOR 85-41000-801 HO FAILURE MODE-OUT OF TOLERANCE. ROLL CHANNEL HAD NO DC OUTPUT. CAUSED BY TEMPERATURE SENSITIVE TRAMSISTOR (2NG294).	" 7 ~	FAILURE MODE-OUT OF SPECIFICATION, AMPLIFIER MAS REJECTED AT THE FACTORY MADY IT WOULD NOT MULL PROPERLY DURING D-C GAIM TESTS. THE FAILURE WAS NOT CONFIRMED. CORRECTIVE ACTION-NO CORRECTIVE ACTION WAS TAKEN BECAUSE THE CAUSE OF FAILURE WAS NOT DETERMINED. TOPILOT-SQUARE-A/B SP-90-04-4036F FAR 157D PALCE YES AC ELECTRONICS LIER AND SERVOAMP TRANSFORMER 27-41000-657 630114 NO	FAILURE MODE-OUT OF TOLERANCE, SERVOAMPLIFIER CANISTER WAS REJECTED FOR ELEVEN OHM RESISTANCE MEASUREMENT BETWEEN ZPZ AND GROUND, PRIMARY OF TRANSFORMER TI IN PITCH DEMODULATOR HADRESISTANCE OF 18.65 OHM, SHOULD BE 80 OHMS, PRIMA T AND SECONDART WINDINGS HAD NO IMPREGNANT, CAUSE OF FAILURE WAS NOT DETERMINED. COM IVE ACTION-VENDOR CHANGED PROCESSES TO INSURE ADEQUATE IMPREGNATION.	UTOFILOT-SQUARE.A/B AX63-0003-134F/FC-CO-02-0011-030 COMPOSITE-FACTORY 134F FACTORY HO 1/ILTER AND SERVOAMF NULLING AMPLIFIER FAILURE HODE-OUT OF TOLERANCE. INTEGRATOR HULL SWITCH TIME COULD NOT BE DETERMINED BECAUSE THE SUSTAINER AND VERNIE RESISTENCE LIMPROPER AMALOR SIGNALS. SYSTEM EFFECT-IMPROPER AMALOR SIGNALS. VEHICLE EFFECT-COMPOSITE RESCHEDULED. PARTIAL COMPOSITE RETEST PERFORMED.	AMPLIFIER WAS REPLACED.
8787EH 808-878TEH	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP FAILURE MODE-OUT OF TOLE	CORRECTIVE ACTION-ALL ICEO ENSEBA P. AUTOFILOT-SQUARE-A/B FARA-99-	FAILURE MODE-OUT OF SPECIFICATION, AMPLIFII GAIN TESTS. THE FAILURE MAS NOT COMFIRHED. CORRECTIVE ACTION-NO CORRECTIVE ACTION MAS AUTOFILOT-SQUARE-A/B FILTER AND SCRYOMM* TRANSFORMER	FAILURE MODE-OUT OF TOLERANCE, SI ZPZ AND GROUND, PRIMARY OF TRANSFY T AND SECONDARY WINDINGS HAD NO II COM. IVE ACTION-VENDOR CHANGED	AUTOFILOT-SQUARE.A/B AX63-0003-134 FILTER AND SERVOAMF NULLING ANPLI FAILURE HODE-OUT OF TOLERANCE. INTEGRA R EMGINES WERE BIASED FULL POSITIVE AT SYSTEM EFFECT-IMPROPER AMALOG SIGNALS. VEHICLE EFFECT-COMPOSITE RESCHEDULED.	CORRECTIVE ACTION-FAULTY MALLING

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DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

373TEN 348-573TEN	TEST/REPORT HUMBER FAILED COMPONENT HANS	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIF	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B FILTER AND BERVOAMP	H6-A8-04-4033F TRANSFORMER	FAR 27-04335-1	630110 FACTORY	NO TRANSONIC NO TRESSA	98156
FAILURE MODE-FAIL DURING OF FAILED. NO DAMMEE OCCURRED.	FAILURE MODE-FAIL DURING OPERATION. PART WAS AMALYZED TO DETERMINE IF DAMAGE OCCURRED WHEN PMASE B OF AILED. NO DAMAGE OCCURRED.	LTERMINE IF DAMAGE	OCCURRED WHEN PHAS	E B OF GROUND POLER	
CORRECTIVE ACTION-NOME,					······································
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	HG-A9-04-4044F TRANSFORMER	# N	150D FACTORY 630110	22	894604
FAILURE MODE- FAIL DURING OFFRATION. D. THREE PHASE TRANSFORMER 27-04159-1	ION. UNIT WAS AMLYZED 59-1 HAD CRACKED CASE.	TO SEE IF DAMAGE OCCURRED WHEN PHASE B NO FUNCTIONAL DISCREPANCIES WERE FOUND.	IED WHEN PHASE B OF HCIES WERE FOUND.	F GROUND POMER FAILE	
CORRECTIVE ACTION-FAILURE ANALYS	RE ANALYSISGROUP ADVISED MAINTENANCE DEPARTMENT THAT GROUND POMER UNIT MUST BE PROPERLY MAIN	E DEPARTMENT THAT G	ROUND POWER UNIT H	UST BE PROPERLY MAIN	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	A-99-C4-4193-F AMPLIFIER TRANSISTORS	FAR 27-41358-803	630110 FACTORY	YES	*****
FAILURE MODE-OUT OF TOLERANCE. THE SPEC ALLONS 25 MV. THE R A-99-04-4078P). AMALYSIS CONFIR COMBINED EFFECT OF THE HIGH-GAIN	FAILURE MODE-OUT OF TOLERANCE. THE DC AMPLIFIER ASSENCLY NOISE LEVEL BETWEEN 10 KC TO 1 MC MAS 150 MV PEAK-TO-PEAK WHEREAS THE SPEC ALLONS 25 MV. THIS CIRCUIT BOARD WAS FAILURE ANALYSED BEFORE AND WAS FOUND TO BE HEAT SENSITIVE (F. R. 4-99-04-4078P). AMALYSIS COMFIRMED THE REPORTED FAILURE AND ATTRIBUTED IT TO HIGH-FREQUENCY OSCILLATION DUE TO THE COMBINED EFFECT OF THE HIGH-GAIN TRANSISTORS RESULTING IN AN OVERALL HIGH LOOP GAIN.	DISE LEVEL BETWEEN : RE ANALYSED BEFORE , A) ATTRIBUTED IT TO NN OVERALL HIGH LCCO	ID KC TO 1 HC MAS NAD WAS FOUND TO B HIGH-FREQUENCY OS FAIN.	RE LEVEL BETWEEN 10 KC TO 1 KC WAS 150 MV PEAK-TO-FEAK ANALYSED BEFORE AND WAS FOUND TO BE HEAT SENSITIVE (FA ATTRIBUTED IT TO HIGH-FREQUENCY OSCILLATION DUE TO THE OVERALL HIGH LOOP GAIN.	
CORRECTIVE ACTION-FACTORY A MINIMUM SPECIFIED VALUE.	IT PROCEDURE, EOP 339.280, WAS REVISED FOR CLARITY IN KEEPING HIGH-FREQUENCY OSCILLATION TO	ED FOR CLARITY IN I	CEFING HIGH-FREGU	ENCY OSCILLATION TO	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAN	A-99-04-4151-F AMPLIFIER RESISTOR	FAR 27-41358-803	650101 FACTORY	3/09 OX	
FAILURE HODE-FAILED DURING OPERA BURNED AS A RESULT OF NAMIFACTUR NED SECAUSE OF DISCOLORATION OF T INJURIOUS TO THE PHYSICAL OR ELE	TION, THE D-C ING TESTING, HE CONFORMAL CTRICAL CHARA	: AMPLIFIER ASSEMBLY WAS REJECTED WHEN RESISTON ANALYSIS DETERMINED THAT THE RESISTON WAS NOT COATING. THE DARKENING IS A CHARACTERISTIC OF C. CERISTIC OF THE COATING.	WEN RESISTOR R-1 ISTOR WAS NOT DAMA ACTERISTIC OF EPOX	RESISTOR R-11 WAS REPORTED TO BE WAS NOT DAMACED BUT APPEARED BUR STIC OF EPOXT RESINS, AND IS NOT	
CORRECTIVE ACTION-PACTORY ME CIRCUIT BOARDS FOR THIS.	CORRECTIVE ACTION-FACTORY INSPECTION SUPERVISION IS NOW AWARE OF CONFORMAL COAT DISCOLORATION AND WILL STOP REJECTI W CIRCUIT SOARDS FOR THIS.	IRE OF CONFORMAL CO.	AT DISCOLORATION A	ND WILL STOP REJECTI	
				PAGE 05ES	

CONVAIR DIVISION

9961 WOT 81

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

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	*****		****		894673		000304			
VENDOR NAME		MAPLIFIER, FAIL		HED POSITIVE AC	5/09	BLE CAUSE DUE T		MB BUE TO POOR	ITOPILOT SYSTEM.	PAGE 0184
# 5 # 5	F 3	10 L	YES NO NAPLIF	ž.	5 E	PROBA	ž Q	2 2	*	
111E	FACTORY	MELIEF	FACTORY OF SERVO	# 300E		FIRMED. I	FACTORY	RMITTENT TOR FAIL	D INTO TI	
VEHICLE BITE PRI DATE DIF TIME DIF OTH	6212 80	NCTUBELLE	421220 - AUTOPILC 344) - CAUT	S FAILURE	022139	FOR PRIN	e i i i	E TO INTE	CORPORATE	
DIF DATA SOURCE PART NUMBER	FAR E7-41361-605	NUMBER 1 FAILED TO MULL DURING MANUFACTURING YEST OF SERVOAMPLIFIER. FAIL Emitter Base of Transistor 81 (200288). Emer Plating Techniques and addition of Strain Relief to unisker and adof	FAR 27-41361-605 8ER 3 DURING TEST O	EVIDENCE OF CAPACITY	FAR 27-41339-403	INDERATIVE, FALLUR 89-04-4086 AND 4067	7AR 87-85800-018	MMMLIFIER FAILED DU MED THE FAILURE, TH	ISTOR DESIGN MAS IN ION G-78G67.	•
TEST/REPORT NUMBER FAILED COMPONENT NAME	H6-85-04-4087-F AWPLIFIER TRAMSIBTOR	ERANCE, AMPLIFIER RED CONNECTION AT INITIATED NEW WHI	ILTER AND SERVOANE AMELIFIER CAPACITOR E7-41361-805 FAR 421220 FACTOR: YES TEXAS INSTRUME NO HIS FAILURE MODE- FAIL TO OPERATE, NO OUTPUT FROM AMPLIYIER MARBER 3 DURING TEST OF AUTOPILOT SERVOAMPLIFIER PACKAGE. FAILURE CAPACITOR C-1 (81-34900-044), CAUCE OF CAPACITOR FAILURE COM-	CORRECTIVE ACTION-VENDOR INFORMED OF FAILURE- INCONCLUSIVE EVIDENCE OF CAPACITOR FAILURE MODE PREVENTED POBITIVE AC	HG-99-04-4085-F CIRCUIT BOARD	ING CHERATICM, MEGATIVE ROLL FUNCTION INCHERATIVE, FAILURE NOT CONFIRMED. PROBABLE CAUSE DUE IRCUIT BOMEL IN PACKAGE. (BEE PARS NG-99-04-4086 AND 4087 FOR PRIMARY CAUSE.)	A-99-04-403EF AMPLIFIER, TRAMS: ETOR	FAILUNE MODE-ERRATIC OPERATION-17 148 REPORTED THAT A SERVOAMPLIFIER FAILED DUE TO INTERHITTENT OPERATION OF TRANSISTOR FOLLINE WAS DUE TO POOR STOR (PWF) DURING VIBRATISTOR FAILURE WAS DUE TO POOR BONDING OF LEAD WINES TO THE JUNCTION.	CORRECTIVE ACTION-RAR-A-99-GA-3646 WAS WRITTEN. A NEW TRANSISTOR DESIGN WAS INCORPORATED INTO THE AUTOPILOT SYSTEM. 60/c now punchable transistors using procurement specification G-78G67.	
STSTEM SUB-STSTEM	AUTOFILOT-BAUARE-A/B FILTER AND BERVCAMP	FAILURE MODE- OUT OF TOLURE COMFINED DUE TO CRACCORRECTIVE ACTION-VENDOR TION OF DOUBLE ENDED TAB.	AUTOPILOT-SQUARE-A/B FILTER AND SCHVOANE FAILURE HODE- FAIL TO OF AILURE COMPINED DUE TO I	CORRECTIVE ACTION- VONDOR	AUTOFILOT-SAUARE-A/R FILTER AND SERVOAMP	FAILURE NOCE-FAIL DURING OF ANOTHER CIRC CORRECTIVE ACTION-MOME.	AUTOFILGT-BECARE-A/S FILTER AND SERVOAMF	FAILURE MODE-ERRATIC OPE STOR (PMF) DURING VIBRATI BONDING OF LEAD WIRES TO	CORRECTIVE ACTION-RAR-A- 60/C NOW PURCHANGE TRANS	

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18 JUN 1988

DIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORNE

VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO	GRIRDS FACTORY YES 091581	FAILURE MODE-OUT OF TOLERANCE. THE AMPLIFIER FAILED DURING AN IN-PROCESS POST-CONFORME. TEST WHEN A DEKATRAN READ I 850 INSTEAD OF 2500 TO 3500 DURING AN A-C SAIM AND SATURATION TEST OF THE PLUS ROLL CHANNEL. ANALTSIS SMOKED THAT TH E AMPLIFIER DRIFTED OUT OF TOLERANCE DUE TO HIV LEARAGE CURRENTS IN TRANSISTOR 64 WHEN MARKED. CORRECTIVE ACTION—ISSUED SURVEY 7-65 TO (1) RETEST ALL NEW ENDISON AV ELEVATED TEMPERATURES AND (2) RETE	421203 FACTORY NO NO NO	FAILURE MODE-OUT OF TOLERANCE, ENGRA, TRANSISTOR WAS REJECTED BECAUSE AMPLIFIER HAD EXCESSIVE HIGH FREQUENCY MOISE. NO DEFECT MAS FOUND IN THE TRANSISTOR.	ELF ETR YES TRANSONIC 098311	FAILURE MOSE-OFFN ELECTCOMPONENT WAS REJECTED FOR AN OFFN PRIMARY WINDING, FAILURE ANALYSIS REVEALED OFFN PRIMARY WINDING, THERE WAS A THREE OH SHORT BETWEEN WINDING, THERE WAS A THREE OH SHORT BETWEEN WINDING, THE REASON FOR THE COMDITION OF THE TRANSFORMER WAS NOT LEARNED. CORRECTIVE ACTION-ETR MERSONNEL WERE REQUESTED TO USE CAUTION WHEN PERFORMING CHECKS ON THIS COMPONENT AND PEEDBACK TRANSOUCERS.	21F 11 YCS 883720	FAILURE MODE-EKRATIC OPERATION, INVESTIGATION OF ERRATIC SUSTAINER AND VERNIER POSITIONS REVEALED THAT THERE MAS MO ENGINE FEEDSACK VOLTAGE AND THE PRIMARY WINDING OF THE EXCITATION TRANSFORMER WAS OPEN. SYSTEM EPPECT-ERRATIC OPERATION, SUSTAINER AND VERNIER EMBINE POSITION SIGNALS MERE ERRATIC AND PHASE A VOLTAGE DRO		
DIF DATA SOURCE PART HUMBER	FAR E7-41648-609	AN IN-PROCESS POST-C N TEST OF THE PLUS I RENTS IN TRANSISTON ENGESA TRANSISTORS A	ran .	ED BECAUSE AMPLIFIES	FAR E7-04355-3	FRITARY WINDING, FAINDING, FAINDING, AND WEST PERFORMING CON WHEN	COMPOST TE-PRD/DPL	STAINER AND VERNIER TATION TRANSFORMER V	R D AND REPLACED.	
TEST/REPORT NUMBER FAILED COMPONENT NAME	8P-89-U4-4123-F AMPLIFIER/TRANSISTOR	RANCE, THE AMPLIFIER FAILED DURING OD DURING AN A-C SAIM AND SATURATION TO HIV! LEAKAGE CUM TO HIV! LEAKAGE CUM SURVEY 7-65 TO (1) RETEST ALL NEW	A-99-04-4043F AMPLIFIER/TRAMBIBTOR	ERANCE, ENSESA TRANSISTOR MAS REJECT THE TRANSISTOR.	A-86-04-4031F TRANSFORMEN, EXCITATION	FAILURE MIDE-OFEN ELECTCOMPONENT WAS REJECTED FOR AN OFEN PRIN WINDING, THERE WAS A THREE CH SHORT BETHEEN PRINARY AND SECONDA THE REASON FOR THE COMDITION OF THE TRANSFORMER WAS NOT LEARNED. CORRECTIVE ACTION-ETR MERSONNEL WERE REQUESTED TO USE CAUTION WH	AAGE-0106/P1-60N-01-21 TRANSFORMER EXCITATION	ERATION. INVESTIGATION OF ERRATIC BUSTAINER AND VERNIER FOSITION AND THE PRIMARY WINDING OF THE EXCITATION TRANSFORMER MAS OPEN. PERATION. BUSTAINER AND VERNIER EMBINE POSITION BISNALS MERE GRR	VENICLE EFFECT-MOME. COMMECTIVE ALTION-EXCITATION TRANSFORMER S/N 108-0200 NºS IR D AND REPLACED.	
BUB-BYEN	AUTOFILOT-BEUARE-A/B FILTER AND BERYONNE	FAILURE MODE-OUT OF TOLER 830 1MATER DOT 8300 TO 850 E ANTERER DRIFTED OUT OF CORRECTIVE ACTION-1550ED 87 ALL SEPROMMETETED AT	AUTOPILOT-SQURE-A/B FILTER AND SCRYOAMP	FAILURE MODE-OUT OF TOLER NO DEFECT MAS FOUND IN TH	AUTOFILOT-SAUARE-A/B	FAILURE MODE-OWEN ELECTI WINDING, THERE WAS A THRE THE REASON FOR THE CONDIT CORRECTIVE ACTION-ETR MER TRAMSDUCERS,	AUTOFILOT-SQUARE-A/B	FAILURE MODE-ENRATIC OPERATION. ENGINE FEEDBACK VOLTAGE AND THE BYSTEN EPPECT-ENRATIC OPERATION. PPEC TO 80 VOLTS.	VEHICLE EFFECT-NOME. CORRECTIVE ACTION-ENCITAT	

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DIF DATA BOURCE VEHICLE BITE PRI VENDOR NAME PART NUMBER DATE DIF TIME DIF OTH VENDOR PART MO	621119 FACTORY YES 895194	GAIN. OUTPUT CURRENT WAS SHA INSTEAD OF CHA AT STATED IMPUT. RESISTOR CASE WAS CRACKED.	COMPOSITE-FRD/DPL 13F 6 YES 606560 621107 NO	COMMECTOR SHORTED DUE TO MOISTURE IN PLUG RESULTED IN DAMACED SERVO AMPLIFIER. SEMALS. CAUSED BOOSTER ENGINES TO GO HARD OVER IN PITCH.	D AND RESCHEDULED. UNTIL DRY. BERVO AMP REPLACED. LATER DESIGN FIX INSTALLED WATER DRIP SHIELD ON COMMEC	13F OSTF-2 YES 695699 500-631 621107 NO	FAILURE MODE-FAIL DURING OPERATION. THE BOOSTER ENGINES MENT TO THE FULL LIMIT IN THE YAM POSITION DURING TEST PTR O Z1-5M55F-CL-3-1 SECTION 140. DURING THE UNDALANCE AND STATIC GAIN TESTS, THE YAW CHANNEL MAS INTERNITTENT. ALL THE YAW CUTPUTS FAILED TO MULL. HEAT SENSITIVE TRANSISTORS &S AND &A IN THE YAW D-C AMPLIFIER CAUSED AND TALL CAUSE OF THIS FAILURE. CORRECTIVE ACTION-RAR A-9D-04-5619 REQUESTING THAT THE TRANSISTOR VENDOR BE INFORMED OF THE CAUSE OF THIS FAILURE. DAC TO RETEST ALL ENSERA. TRANSISTORS IN STOCK, NEW TRANSISTOR WILL BE TESTED TO REVISED PROCEDURES.	621106 FACTORY YES TEXAS INSTRUME 896043	FAILURE MODE-ERRATIC OPERATION-DURING BENCH TESTS, SPURIOUS OSCILLATIONS ON THE OUTPUT OF THE MEXT ASSEMBLY CIRCUIT BOARD MERE TRACED TO THE TRANSISTOR, ALL PARAMETERS WERE WELL WITHIN MANUFACTURERS SPECIFICATIONS. THE INITIAL MALF WCTION MAS PROBABLY DUE TO SOME DEFECT IN THE NEXT ASSEMBLY CIRCUIT SOARD.	CONFIRMED. NO CORRECTIVE ACTION. PACTORY PERSONNEL WERE RESUESTED TO FORWARD ALL CIRC.
TEST/REPORT NUMBER DIF DATA SO FAILED COMPOSENT NAME PART NUMBER 1	A-98-64-4034F AMPLIFIER/RESISTOR E7-41301-1	HAD KIGH PERCENT.	DAS26/02-640-17-13 COMPCS COMPOSITE-FI COMMECTOR, STAGING DISCOMMECT	. •	ABONTED AND RESCHEDULED. URGED UNTIL DRY. BERVO AMP REPLACED. LATER DESI	A-90-04-3546F AMPLIFIER TRANSISTOR-END29A 27-41000-831	FAILURE MODE-FAIL DURING OPERATION. THE BOOSTER ENGINES WENT TO THE FULL LIMIT IN THE YAW POSITION DU TO 21-SMSSF-CL-3-1 SECTION 140. DURING THE UNDALANCE AND STATIC GAIN TESTS, THE YAW CHANNEL WAS INTERN E YAW OUTFUTS FAILED TO MULL. HEAT SENSITIVE TRANSISTORS OS AND OA IN THE YAW D-C ANFLIFIER CLUSED TO CORRECTIVE ACTION-RAR A-90-04-5619 REQUESTING THAT THE TRANSISTOR VENDOR BE INFORMED OF THE CAUSE OF COARECTIVE ACTION-RAR A-90-04-5619 REQUESTING THAT THE TRANSISTOR VENDOR BE INFORMED OF THE CAUSE OF COAL TO RETEST ALL ENGEDA. TRANSISTORS IN STOCK, MEW TRANSISTOR WILL BE TESTED TO REVISED PROCEDURES.	A-99-04-3563F CIRCUIT BOARD, TRANSISTOR 67-95900-019	FAILURE MODE-ERRATIC OPERATION-DURING BENCH TESTS, SPURIOUS OSCILLATIONS O BOARD WERE TRACED TO THE TRANSISTOR, ALL PARAMETERS WERE WELL WITHIN MANUF, WCTION WAS PROBABLY DUE TO SOME DEFECT IN THE MEXT ASSEMBLY CIRCUIT BOARD.	>- I
SYSTEM BUB-SYSTEM	AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	FAILURE MODE-OUT OF TOLERANCE, BERVOANPLIFIER REATSTOR RZES WAS ES OMYS SMOULD BE SE OM ONE CORRECTIVE ACTION-MOME.	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF	FAILURE MODE-ELECTRICAL SHORT. SYSTEM EFFECT-IMPROPER ANALOG	VEHICLE EFFECT-CHPOSITE ABONTED AND RESCHEDULED. CORRECTIVE ACTION-PLUE PURGED UNTIL DRY. SERVO A TOR.	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF	FAILURE HODE-FAIL DURING OPERA TO 21-SMSSF-G3-1 SECTION 140: E YAW OUTPUTS FAILED TO MULL. H CORRECTIVE ACTION-RAR A-9D-G4- GO/C TO RETEST ALL ENSESA. TRAN	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	FAILURE HODE-ERRATIC OPE BOARD WERE TRACED TO THE UNCTION WAS PROBABLY DUE	CORRECTIVE ACTION-FAILURE NOT UITAY INVOLVED TO FAILURE ANAL

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AUTOFILOT-SQUARE-A/B HG-98-04-53E1-F FILTER AND SERVOAMF FILTER AND SERVOAMF FILTER AND SERVOAMF FILTER AND SERVOAMF FAILURE MODE- FAIL DURING OPERATION, UR YAW BERVOAMFLIFIER FAILED TO HULL DURING FACTORY FINAL CHECKOUT STATIC GAINS TEASTS. CARES. CALCARE WAS DETERIORATION OF MODULATOR-ASSEMBLY FILTER TRANSISTORS &1 AND RE DUE TO A MANUFACTURING TEASTS. CALCARE WAS DUE TO A MANUFACTURING T	M6-08-04-3521-F FILTEN-GLECTRICAL, TRANSISTON OPERATION, UR YAW BERVOAMPLIFIER	FAR E7-41645-3 FAILED TO HULL DUM EMBLY FILTER TRANSI	SELLOE ING FACTORY BYOND &L AN	PACTORY	YES 60/C NO	*****
ILURE MODE- PAIL DURING OPERATION, UR 1818, CAUSE OF PAILURE WAS DETERIORATE	YAW BERVOAMPLIFIER	FAILED TO MULL DUM FPELY FILTER TRANSI	ING FACTORY BTORB 61 AN			
	ON OF HODULATOR-ABI			FINAL C	FECKOUT STATIC GAIN TO A MANUFACTURING	-
CORRECTIVE ACTION-NOME-SUPPLY OF THIS TYPE TRANSISTOR (LAPASSÍVATED) DEPLETED IN GO/C PRODUCTION NOY SE.	TPE TRANSISTOR (UM	ASSÍVATED) DEPLETED	TH 60/C PR	00 UC 11 ON	NOV 62.	
AUTOFILOT-SQUARE-A/8 SP-90-04-3953F FILTER AND SERVOAMP AMPLIFIER		FAR E7-41000-887	150179	K E	3/05 ON	•
PAILURE HODE-OUT OF TOLERANCE, THE SERVED FAILURE HAS CAUSED BY USING OBSOLETE CORECTIVE ACTION-FAILURE HOT CONFIDED	OLENANCE. THE SERVOAMPLIFIEM FAILED WHEN IT EXHIBITE. BY USING COSOLETE TEST PARAMETERS BY BASE PERSONNEL. LURE HOT CONFIDHED, A NEW SET OF PARAMETER DOCUMENTS.	IQLERANCE. THE SERVOAMPLIFIER FAILED WEN IT EDHIBITED A LOW ENGINE SLEWING VOLTABY USING OBSOLETE TEST PARAMETERS BY BASE PERSONNEL. ILURE HOT CONFIDHED, A NEW SET OF PARAMETER DOCUMENTS WERE FORMARDED TO THE BASE.	LON ENGINE	SLEWING TO THE	CLENANCE. THE SERVOAMPLIFIED FAILED MEN IT EXHIBITED A LOM ENGINE SLEVING VOLTAGE. THE REPORT BY USING COSCLETE TEST PARAMETERS BY BASE PERSONNEL. LUBE HOT CONTIPHED, A MEN SET OF PARAMETER DOCUMENTS WERE FORWARDED TO THE BASE.	
	31 8 TOR - ENG 2 8 A	FAR 27-41000-831	421025	6.11	YES NO	886034
FAILURE MODE-FAIL TO OPERATE AT PRESCRIBED TIME. DURING MAPCHE CHECKOUT PROCEDURE THE SERVONMPLIFIER MOULD NOT GIV OUT A PITCH BISMAL. THE FAILURE COULD NOT BE DUPLICATED DURING FAILURE AMALYBIS. MOMEVER. DURING PITCH FILTER BATION ATION TESTS, THE OUTPUT TOOK 30 SECONDS TO REACH A MALL MEN THE GYRO SIGNAL PHASE WAS REVERSED. MAXIMUM ALLOMBLE S 10 SECONDS. THIS DISCREPANCY WAS CAUSED BY TWO MEAT BENSITIVE TRANSISTORS.	BED TIME, DURING MA DY BE DUMICATED DI TO REACH A MULL DHE D BY TWO HEAT BENSI	PCHE CHECKOUT PROCE RING FAILURE ANALYS IN THE GYRO SIGNAL P TIVE TRANSLATORS.	DURE THE SE IS, HOWEVER HASE WAS RE	RVOAMPLII DURING	CPERATE AT PRESCRIBED TIME, DURING MAPCHE CHECKOUT PROCEDURE THE SERVOAMPLIFIER WOULD NOT GIVE TAILURE COULD NOT BE DUMING FORTED BURING FAILURE AMALTSIS, MOMEVER, DURING PITCH FILTER SATUR IT TOOK 30 SECONDS TO REACH A MALL WHEN THE GYRO SIGNAL PHASE WAS REVERSED, DAZIMUM ALLOMABLE ! ICREPANCY MAS GAUSED BY TWO HEAT SENSITIVE TRANSISTORS.	
CGRECTIVE ACTION-RAR A-90-04-3619 WAS WRITTEM ABOUT THE HEAT SENSITIVE TRANSISTOR PROBLEM AND ADDRESSED TO VENDOM QUALITY CONTOOL FOR PROPER CORRECTIVE ACTION, ALL NEW ENSEA TRANSISTORS RECEIVED FROM THE VENDOM AND ALL ENDERN IM STOCK VY GOZC WILL UNDERGO SPECIAL TESTING AT ELEVATED TEMPERATURES, ALL SERVOAMPLIFIERS AT RISSILE BASE AND IN VON FACTORY WILL SIMILARLY DE TESTED.	WRITTEM ABOUT THE PITON, ALL NEW ENDER	A-90-DA-3619 LMS LWITTEN ABOUT THE HEAT SENSITIVE TRANSISTOR PROBLEM AND ADDRESSED DPER CORRECTIVE ACTION, ALL REM ZMSZBA TRANSISTORS RECEIVED FROM THE VENDOR AND ALL DERGO SPECIAL TEBIING AT ELEVATED TEMPERATURES, ALL SERVOAMPLIFIERS AT MISSILE BASE 7 BE TEBIED.	SSTOR PROBL VED FROM TH OAMPLIFIENS	E VENDOR	DDRESSED TO VENDOR AND ALL ENDESAS IN ILE BASE AND IN 'S.	
AUTOFILOT - BQUARE - A/B A-98-04-8598F		FAR E7-41000-831	230134	2.4	# 2	

GENERAL DYNAHICS CONVAIR DIVIBION

18 JUN 1958

18 JUN 1858	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TOPILOT BYBTEH-AIRBOR	¥			1
8787EX 808-8787EX	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE SITE DATE DIP TIME DIF		PRI VENDOR NAME OTH VENDOR PART NO	
CORRECTIVE ACTION-NONE.	FAILURE NOT CONFIRMED.	and the second statement of the second statement of the second se				10 50 32
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	AX62-0071/FC-CO-01-0008-002 AMPLIFIER	COMPOSI TE-FACTORY 27-41000-831	2300 FACTORY 621016	7E3 7E8		•
FAILURE MODE-FAIL DURING DUE TO A FAULTY SERVO AM	FAILURE MODE-FAIL DURING OPERATION-BOOSTER NO. 1 YAN/ROLL FEED BACK INDICATED AN EXTENDED MULING PERIOD AT STAGING Due to a Failty servo amplifier packale and hydraulic actuator assembly	FEED BACK INDICATED LATOR ASSEMBLY	AN EXTENDED MULLIN	6 PERIO	0 AT STAGING	
SYSTEM EFFECT-IMPROPER AMALOS SIGNALS.	MALOS STEMALS.					***************************************
WENTELE EFFECT-COMPOSITE	VENICLE EFFECT-COMPOSITE DELAYED OR RESCHEDULEDSYSTEM AND COMPOSITE RETESTING MERE REGUIRED.	ND COMPOSITE RETESTIN	G NERE REQUIRED.			,
CORRECTIVE ACTICI-THE SE	CORRECTIVE ACTICHME SERVO CANISTER AND HYDRAULIC ACTUATOR WERE REPLACED.	OR WERE REPLACED.				
AUTOFILOT-SQUARE-A/B FILTER AND SERVOANF	A-96-04-4061F SENVO AMPLIFIEM TRANSISTOR	FAR E7-4100E-005	GEIDIE ETR	, 46.8 40		67.673
FAILURE MODE-OUT OF TOLE MELING. GN355).	TOLERANCE-YAM DISPLACEMENT GAIN 'NA TOO LOM. TRANSISTOR HAD LOM GAIN WHEN HEATED CAUSED BY CHAN	OD LOM. TRANSISTOR HA	LON GAIN WEN HE	ATED CA	USED BY CHAN	
CORRECTIVE ACTION-NOWE.	CHLY SEVERLY CHAMBLED TRANSTATORS MOULD CAUSE A FAILURE.	B NOVED CAUSE A FAILU	į			
AUTOFILOT-SQUARE-A/B FILTE: AND SERVOAM	HG-98-04-3320-F	FAR RT-41361-603	GRIDII FACTORY	YES FO		***************************************
FAILURE HODE-OUT OF TOLE TENT OPERATION OF MORNER	FAILURE MODE-CUT OF TOLERANCE. BOOSTER 2 PITCM AMP FAILED TO MULL, FAILURE WAS CONFIANCD, CAUSE OF FAILURE INTERHIT TENT OPERATION OF MFORMER TI DUE TO SHORTCIRCUITING BETNEEN PINS 4 AND 6. CAUSE OF SHORT CIRCUITING UNDETERHINED.	TO MALL, FAILURE WAS N PINS 4 AND 6. CAUSE	CONFIRMED. CAUSE OF BHORT CIRCUITI	OF FAIL	URE INTERNIT TERMINED.	
CORRECTIVE ACTION-INDUCED WOLTACE TEL	CORECTIVE ACTION-INDUCED VOLTAGE TEST OF 23DV AT 800 GPS ADOED TO RI TEST PROCEDURE TO PACILITATE REJECTION UNITS F QUESTIONABLE ELECTRICAL INTEGRITY.	ADDED TO REST PRO	CEDURE TO FACILITA	TE REJE	CTION UNITS	
AUTOFILOT-SQUARE-A/B FILTER AND BERVOAM	A-98-04-3505-F Transforken	FAR E7-41000-631	451004 MAPS	76. 80		0.27.00
FAILURE MODE- FAIL TO OPERATE. D PROBLEM DUE TO OPEN-CIRCUITED	FAILURE MODE- FAIL TO OPERATE. BOOSTER ENGINES WOULD NOT GINDAL DURING AUTOPILOT SYSTEMS TEST, DISCREPANCY CONFIRME B problem due to open-circuited primary winding in Pitch Channel input transpormer.	GINBAL DURING AUTOPIL HANNEL INPUT TRANSPORT	OT BYBTEMS TEST. D CR.	IBCREPA	NCV CONFIRME	
CORRECTIVE ACTION-NOME.						
					PAGE DSE	

GENERAL DIMMICS CONVAIR DIVISION

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STATEH BUL-BTATEH	TENT/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOURCE PART NUMBER	VEHICLE SITE DATE DIF	\$17E	O TH VE	PRI VENDOR NAME OTH VENDOR PAR' NO	
AUTOPILOT-BRUARE-AZE FILTER AND BERYCAMP	HE-EB-DA-3471-F BERVOAMPLIFIER COMMECTOR	FAR 27-41000-841	621004 E	ETR	7ES 60/C	J	:
PAILURE MODE-STRUCTURAL 1M6 HANDLING FOR SHIPMEN M6 OWER THE COMMECTOR.	FAILURE MODE-STRUCTURAL. SERVOAMPLIFIER CANISTER MAS IR/O POR SENT PINS IN COMMECTOR UBJZ. THESE PINS MERE BENT DUR ING HANDLING FOR SHIPMENT. CAUSE OF FAILURE MES ATTRIBUTED TO FAILURE TO USE TIGHT PITTING PROTECTIVE PLASTIC COVERT MS OMER THE COMMECTOR.	FOR BENT PINS IN CO. TO PAILURE TO USE TI	MECTOR UBJE GAT PITTING	. THESE	1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N	RE BENT DUR STIC COVERT	
CORPECTIVE ACTION-ALL FI	FUNCTIONS RESPONSIBLE FOR HANDLING AND TRANSPORTING NOTIFIED OF PAILURE AND CAUSE OF PAILURE.	AND TRANSPORTENG NOTI	FIEB OF FAI	LURE AM	CAUSE	OF FAILURE.	
AUTOFILOT-SQUARE-AZB FILTER AND SERVOANF	A-9N-04-4025F	FAR 27-41000-831	69F A	AL TUS	YES 60/0	J	******
FAILURE MODE-OUT OF TOIL	FAILURE MODE-OUT OF TOLERANCE-SERVO CAMMISTER MAS REJECTED FROM MISSILE 49F BECAUSE IT REPORTEDLY CAUSED THE 6YRO C MMISTER TO GIVE A FAIL INDICATION. NO MALFUNCTION MAS FOLAD IN THE BEPVO CANNISTER.	D FROM MIBSILE 49F BI	CAUSE IT RE STER.	PORTEDLY	CAUSED	THE GYRO C	***************************************
CORRECTIVE ACTION-NOME-	-FAILURE WAS NOT CONFIRMED AT PACTORY.	. 184					
AUTOPILOT-SQUARE-A/B	A-48-04-4022F AMPLIFIER/CAMACITOR	FAR 27-41000-653	167 6	FACTORY	YES		9967388
FAILURE MODE-FAILED TO . LE. THE FAILURE WAS ATTRI	FAILURE HODE-FAILED TO OPERATE AT PRESCRIBED TIME- WERMIER TWO YAW AMPLIFIER HAD HO OUTPUT DURING CHECKOUT OF VEHIC LE. THE FAILURE WAS ATTRIBUTED TO CAFACITOR C1 IN THE WERNIER TWO YAW AMPLIFIER WHICH HAD A HIGH RESISTANCE SHORT.	R THO YAM AMPLIFIER ! IER THO YAM AMPLIFIE!	MATCH HAD	A HICH I	CHECKO	UT OF VEHIC CE MORT.	
CORRECTIVE ACTION-CAPACE	CITOR VENDOR IMPROVED MANUFACTURING PROCESS.	PROCESS.					
AUTOFILOT-SQUARE-A/S FILTER AND SERVOKMP	A-99-02-4016-F Transtetor	FAR E7-41359-801	4 020029	PACTORY	TES TEX	TEXAS INSTRUME NTS	•• 51 E ¢
FAILURE MODE- ERRATIC OF CRACK IN BANE-EMITTER JA MTG EMADO.	operation. Transistor by Uns Heat sensitive, Heat sensitivity of transistor Uns attributed to Junction and Loose enitter lead connection at the silicon chip. Transistor Uns texas instrume	ENSITIVE, MEAT BENBIT WECTION AT THE BILICO	IVITY OF THE	ANSISTOR	4 4 4 10 10 10 10 10 10 10 10 10 10 10 10 10	BENBITIVITY OF TRANSISTOR WAS ATTRIBUTED TO BILICON CHIP, TRANSISTOR WAS TEXAS INSTRUME	
CORRECTIVE ACTION-TEXAS	CORRECTIVE ACTION-TEXAS INSTRUMENTS CHANGED MANUFACTURING PROCESS OF EMSS.	PROCESS OF ENGSS.					
						PAGE 05E9	

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DIPPICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBOANE

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UNDOLLOS BRENDARE 1.09-02-1812-7 1.09-02-181
13 4 33
4 33
22
LIFTER FAILED DUE TO SHORTED TRANSISTORS GS AND GA (RHEEM PAGE). FAILU R E BEING BHORT-CIRCUITED TO GROUND, THE SHCRT WAS INADVERTANTLY MADE W OMED TO USE CARE IN TROUBLESHOOTING. FAR SP ETR YES GD/C FAR SEDANTING NO FOR THE POLICY AND INP FAILED WHEN THE ROLL D.C. AMPLIFIER OUTPUT WOULD NOT RESPOND TO AN INP FRIED BY EXTENSIVE TESTS. SUSPECT MALFUNCTION OF THE TEST CIRCUITRY AT TO OF THIS AMALYSIS AND MERE ALGUESTED TO CHECK THE TEST CIRCUITRY IN T
PAR SES CARE IN TROUBLESHOOTING. FAR TES 60/C R7-41000-831 GEDWII NO PAILED WHEN THE ROLL D.C. AMPLIFIER OUTPUT WOULD NOT RESPOND TO AN IMPIRED BY EXTENSIVE TESTS. SUSPECT MALFUNCTION OF 7-6 TEST CIRCUITRY AT THE OF THIS AMALYSIS AND WERE RESULED TO CHECK THE TEST CIRCUITRY IN T
FAR 8F ETR YES 6D/C ET-41D00-831 6ED411 NO FAILED WHEN THE ROLL D.C. AMPLIFIER CUTPUT WOULD NOT RESPOND TO AN INPIRED BY EXTENSIVE TESTS. SUSPECT MALFUNCTION OF THE TEST CIRCUITRY AT TO OF THIS AMALTSIS AND WERE RUSUKSTED TO CHECK THE TEST CIRCUITRY IN T
PAILED WHEN THE ROLL D.C. AMPLIFIER OUTPUT WOULD NOT RESPOND TO AN IMPIRED BY EXTENSIVE TESTS. SUSPECT MALFUNCTION OF THE TEST CIRCUITRY AT TO OF THIS AMALYSIS AND MERE REGUESTED TO CHECK THE TEST CIRCUITRY IN T

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VENDOR HANE VENDOR PART NO		HANCE INTEGUL	SIF DAPB YES GEOTET NO TOLERANCE READOUTS IN THE PITCH CHANNELS WE CUIPUT CAUSED BY TRANSFORMER TE, P/N 27-041 THE CAUSE FOR THE NOISY TRANSFORMER WAS NOT	ARE NOVE NOW I		ET-41361-605 S/N 1367 HAD NO OUTPUT. TRANSISTOR OPEN-CIRCUITED. TRANSISTOR 63 LAS SHORTED ENLITT THAT THE PLUS AND MINUS OUTPUT OF THE BERYDAMPL	SONNEL TO EXERCISE CAUTI A CAUTICM MOTE MAS ADDE GROUP INITIATED PROPOSA	YES HUGHES	108 403,465 AP	PACE 0939
E O	i S		YES NO HE PITTY NO	PER TEST	ž 8	20 00 TU 4 TU 4 TU 4 TU 4 TU 4 TU 4 TU 4	IL TO NUTTO	¥ 5	N CA	
SITE TIME DIF	FACTORY	WED SOURCE	DAFB LITA IN TH IY TRANSFO HE HOISY	SUPPLY. 1	DAFB	HAT HAD MC	PERSONNE 1 OH. A C.	0 V J	ECEIVED (
VEHICLE DATE DIF	104F 420731	T SENSITI	SAF 620727 INCE READO CAUSED 8	OF SHORT	31F 620727	IOS S/N 13 JITED. TRA	NOTIFYING ITEM POMEN E ENGINEE	51F 620727	COS MERE I	
DIF DATA SOURCE PART NUMBER	FAR 104F FACTORY YES NO 87-41000-631 820731 NO	TRANSISTOR, WESTRAM, WAS DELETED AS AN APPROVED SOURCE FOR FUTURE PROCUR. TRANSISTOR, WESTRAM, WAS DELETED AS AN APPROVED SOURCE FOR FUTURE PROCUR.		-Y DURING A PERICO REHOYED DURING QUAI	FAR 27-41000-831	TIER P/N E7-41361-6 R-5 NERE OPEN-CIRCI KDICATED THAT THE I	SENT TO ALL SITES DOTING WITH THE SYS 35, 37. THE BERYCATIONAL MISSILES.	FAR 87-41000-631	DECK 481-704, NO-(INDYAW CHANNELB PA)	
TEAT/REPORT HUMBER FAILED COMPONENT NAME	04-3333F AMPLIFIER-TRA	TRANSISTOR OF OF THE ENIESE THEIR STOCK OF	04-3578F R-ELECTRICAL-TRANSFORNER-TE DURING FAILURE ANALYSIS, SLIG O A DISTORTED SIGNAL FROM THE LTER ASSENGLY. THE TRANSFORNER	PETERHINED. CORRECTIVE ACTION-THE MOISY RANNFORMERS WERE FABRICATED ONLY DURING A PERIOD OF SHORT SUPPLY. THERE ARE NOWE HOW I STOCK. ANY THAT WERE INSTITUTE ACTION WILL BE TAKEN.	A-99-04-3576F AMPLIFIER TRANSISTOR	FAILURE MODE-FAIL DURING OPERATION, VERNIER NO. 2 YAW AMPLIFIER P/N 27-41361-805 S/N 1387 HAD NO OUTPUT. TRANSISTOR 8 84 AND 85 HAD ENITER LEADS MELTED OPEN. DIODES CR-4 AND CR-5 WERE OPEN-CIRCUITED. TRANSISTOR 93 WAS SHORTED ENITT ER TO COLECTOR. THE EXTENT AND COMDITION OF THE COMPONENTS INDICATED THAT THE PLUS AND MIMUS OUTPUT OF THE SERVOAMPL IFICR WAS SHORT-CIRCUITED TO GROUND.	CORRECTIVE ACTION-THA ST8-588 SOF, DATED MARCH 2, 1962, MAS SENT TO ALL SITES NOTIFYING PERSONNEL TO EXERCISE CAUTI ON DURING PERFORMANCE OF COMPLEX STRIEMS CHECKS OR TROUBLESHOOTING WITH THE SYSTEM POMER ON, A CAUTION HOTE MAS ADDE D TO THE AUTOFILOT SYSTEM NO-60 INSTRUCTIONS OF DECKS 6, 15, 35, 37. THE BERVICE ENGINEERING GROUP INITIATED PROPOSA LS TO INSERT A CAUTION NOTE IN ALL TECHNICAL CROERS FOR OPERATIONAL MISSILES.	A-98-04-3578F AMPLIFIER: TRANSISTOR-HATSSA	RANCE, DURING PERFORMANCE OF MAPCHE DECK 451-704, NO-608 WERE RECEIVED ON CARDS 483,465 AND PROV VERNIER NO. 1 EMGINE :4 ROLL ANDYAW CHANNELS FAILURE WAS DUE TO A DEFECTIVE TRANSISTO. 1851CR 85 TO FAIL.	
2727EH 8UÐ-3731EH	AUTOFILOT-SQUARE-A/B A-AS- FILTER AND SERVOAMP FITCH FAILURE MODE-CUIT OF TON FRANCE	RITY TRACED TO PITCH AMPLIFIER CORECTIVE ACTION-THE VENDOR ENENT. THE FACTORY HAS PURCED	AUTOPILOT-SAUARE-A/B A-94- FILTE AND SERVOAMF FILTE FAILURE MODE-OUT OF TOLERANCE. RE NOTED. THESE MERE ISOLATED T 64-1, IN THE PITCH MODULATOR FI	CORECTIVE ACTION-THE MOISY RAN N STOCK, ANY THAY MERE INSTALLE. 2 AND 121-52, NO FURTHER CORPETS	AUTOFILOT-BAUARE-A/B FILTER AND SERVOAMP	FAILURE MODE-FAIL DURING OPERATION. S 44 AND 45 HAD ENITTER LEADS MELTED ER TO COLECTOR. THE EXTENT AND CONDI	CORRECTIVE ACTION-TWX 578-588 (ON DURING PERFORMANCE OF COMPLE) D TO THE AUTOPILOT BYSTEM NO-GO LS TO INSERT A CAUTION NOTE IN A	AUTOFILOT-SAUARE-A/B FILTER AND BERVOANF	FAILURE MODE-OUT OF TOLERANCE, DURING 488-INDICATING NO OUTPUT FRON VERNIER R &E (HATESA) CAUSING TRANSISTOR &S TO	

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JYSTEN SUS-SYSTEN	TEST/REPORT HUMBER PAILED COMPOMENT MAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	817E 71ME DIF	PRI VENDOR MANE OTH VENDOR PART NO	
CORRECTIVE ACTION-FAR A-	CORRECTIVE ACTION-FAR A-89-04-3421 REGESTING THAT THE VENOOR BE NOTIFIED OF THIS AMALYSIS.	MOOR BE NOTIFIED OF	MIS ANALYS	FACTORY	YES TEXAS INSTRUME	124271
FILTER AND BERVOAM	DI COL	87-19008-028			ČA TH	
FAILURE MODE-OPEN (ELECT). FAIL	n. FAILURE CONTINED BUT CAUSE NOT DETERMINED.	OT DETERMINED.				
CORRECTIVE ACTION-NOME.						
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAM	A-9L-04-3440-F ROLL AMPLIFIER BIODE	FAR 27-41000-831	620723	LINCOLN	YES NO	a 50 7a
FAILURE MODE-FAIL DURING DIGGE CR-5 TYPE BYBOG.	FAILURE MODE-FAIL DURING OPERATION. FAILED DURING MAPCHE TEST WHEN THE ROLL AMPLIFIER HALFUNCTIONED DUE TO SHORTED	TEST WHEN THE ROLL	AMPLIFIES N	ALFUNCTS	SHED BUE TO SHORTED	
CORRECTIVE ACTION-NOME. THE SVE	THE SYBDS DIODE IN THIS CIRCUIT HAS BEEN REPLACED BY A 1N2034.	HAE BEEN REPLACED BY	A 112034.			
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	A-80-04-3357F TRANSFORMER BERVO AMPLIFIER	FAR E7-41000-831	57F 620722	AT.	7E3	694721
FAILURE HODE- FAIL TO CPERATE. TO SHORTED TRANSFORMER TE. MULT POOR INSULATION IMPREGNATION.	PERATE. SERVOAMPLIFIER-FILTER CANISTER IR/D FOR LACK OF ROLL CHANNEL. E. MALTIPLE COMPOMENT DAMAGE RESULTED FROM SMORT TRANSFORMER FAILURE ATION.	NISTER IR/D FOR LACK ULTED FROM SMORT TRAN	OF ROLL CHI		OUTPUT. FAILURE TRACED OCCURRED AS A RESULT OF	<u> </u>
CORRECTIVE ACTION-DOUBLE	CORRECTIVE ACTION-DOUBLE WALTAGE-DOUBLE PREQUENCY TEST ADDED TO RECEIVING INSPECTION. AND 121-52 DATED 19 SEP 62 AND 3 OCT 62 REMOVED POSSIBLE FAULTY TRANSFORMER FROM TOP	ADDED TO RECEIVING IN		GOZC SURY PACKAGES.	GOZC SURVET INSTRUCTION 116-6 Packages.	
AUTOFILOT-BAUARE-A/B FILTER AND SERVOAM	A-9H-04-3350F AMPLIFIER DICOE	FAR E7-41000-613	18F 620718	SCHILLIN YES	N YES	
FAILURE HODE- FAIL TO OPERATE AT PRES CTLY, HOMEVER, AN INTERNITTENT FAILURE ARD AZAS, THIS PROBABLY WAS CAUSED BY	AT PRESCRIBED TIME. FAILURE WAS FOUND IN USED BY EXPANSION OF	CANISTER IR/D FOR FAILURE TO OPE THE PITCH CHANNEL. DIODES CR-E CONTORNAL CONTING WHICH MAS TOO	TO CPERATE. B CR-E AND CR AB TOO THICK.	. THE CAN CR-0 WERE	HATER OPERATED CORRE POUND CRACKED ON BO	ш 0
CORRECTIVE ACTION-MATER	CORRECTIVE ACTION-MATERIAL MANUFACTURING SPECIFICATION DATED GED404 MAS ISSUED ON THE SUBJECT OF CONFORMAL COATING.	DATED 620404 MAS 188	UED ON THE	SUBJECT (JE CONFORMAL COATING	•
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3841 207 21	DIPFICULTIES REVIEW-AUTOFILGT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBON	Ā		,	
ATSTER SES-STSTER	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART MUMBER	VEHICLE DATE DIF 71	311E PR1	PRI VENDOR NAME OTH VENDOR PART NO	
	erene de la companya de la companya de la companya de la companya de la companya de la companya de la companya	and design of the second second second second second second second second second second second second second s				******
AUTOFILOT-SQUARE-A/B	X6-88-04-UE87-F	FAR 27-41000-643	620717 FA	FACTORY YES	YES 60/C NO	0.00
FAILURE MODE-OUT OF SPE O CAM, IT MAS ASSUMMED 1	FAILURE MODE-OUT OF SPECIFICATION-SERVO CAN MAS OUT OF SPEC ON FREGUENCY RESPONSE, NO FAILURE WAS FOUND IN THE SERV O CAN, IT MAS ASSUMMED THE FAILURE WAS CAURED BY TEST EQUIPMENT MALFUNCTION OR INCORPECT METER READING.	C ON FREQUENCY REAP MENT MALFUNCTION OR	NSE, NO PAIL INCORVECT NE	URE WAS F TER MEADS	OUND IN THE SERV NG.	
CORRECTIVE ACTION-NOME-FAILURE NOT CONFIRMED.	-FAILURE NOT CONFIRMED.					
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAN	A-A9-04-5280-F Transistor	FAA E7-41000-831	620713 FA	PACTORY YE.	YES WESTAAN NO	
FAILURE MODE-OUT OF TOL	TOLERAMCE. SERMO CAN WAS REJECTED FOR HIGH POSITIVE PITCH INTEGRATOR GAIN. TRANSISTOR 93 ON THE TO BE HEAT SENSITIVE, TRAHSISTOR MAS MESTRAN EMIRJE.	HIGH POSITIVE PITON MESTRAN ENIESE.	INTEGRATOR 6	AIN. TRAN	SISTON 03 ON THE	:
CORRECTIVE ACTION-MEST	CORRECTIVE ACTION-MESTRAN WAS REMOVED FROM APPROVED VENDOR LIST.	L13T.	A designation of the contract	A CONTRACTOR OF THE CONTRACTOR	And the second s	The state of the s
AUTOFILOT-SQUARE-A/B	A-99-04-3296F AMPLIFIER, DICOE	FAR 27-41358-803	620712 FA	FACTORY NO	5	*****
FATLUNE MODE-OUT OF SPE CUR THROUGH APPLICATION	SPECIFICATION, FAILED SATURATION TEST, FOUR ZENER DIODES MENE DANNGED, THE DANNGE COULD ONLY OC ON OF VOLTAGE TO AMPLIFIER OUTPUT.	FOUR ZENER DIODES N	EPE DAMAGED.	THE DARK	HE COULD ONLY OC	
CORRECTIVE ACTION-NONE-	CORRECTIVE ACTION-NOWE-FACTORY PERSONNEL MERE INFORMED OF RESULTS OF ANALYSIS.	RESULTS OF ANALYSIS.				
AUTOFILOT-SQUARE-A/B	ARIA1-0-1-128 AMENDMENT A/FC-4CO-0 COMPOSITE-FACTORY 4-128	D COMPOSITE-FACTORY	1280 FA	FACTORY NO NO		012668
FAILURE MODE-OUT OF TU. INIMUM ALLOMED. THIS AND	TOLERANCE. VERHIER NO. Z PITCH/ROLL SERVO BIAS GAINS WERE APPROXIMATELY 35 PER CENT BELON THE ANOMALY MAS CAUSED BY A NOMLIMEAP ISOLATION AMPLIFIER IN THE AGE.	RVO BIAS GAINS WERE ATION AMPLIFIER IN T	APPROXIMATEL NE AGE.	7 35 PER	CENT BELOW THE M	
BYSTEH EFFECT-IMPROPER ON THE HINTHUM ALLONDS.	BYSIEH EFFECT-IMPROMER AMAIOG BIGHALS. WERNIER MO. 2 FITCH/ROLL BERVO BIAS GAINS WERE APPROXIMATELY 13 PER CENT BEL M THE HINIHUM ALLOMED.	POLL BERVO BIAS SAI	HS MERE APPR	OKI MA TEL Y	18 PER CENT BEL	
WENTELE EFFECT-COMPOSIT	WENICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTIMS RESUIRED.	CAUTAED.				
CORRECTIVE ACTION-THE SIGNAL	HEMAL BOLATION AMPLIFIER IN THE ASE	E MAB REPLACED.				
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	DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	OPILOT SYSTEM-AIRBON	.¥€			ſ
8787EH 818-875H	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE BITE	I W DI	BITE PRI VENDOR HAME TIME DIP OTH VENDOR PART NO	
AUTOPILOT SEUN 2E-A/B FILTER AND SERVOAMP	A-18-04-3230F Awrlifier-Transistor	FAR 27-41000-831	TOF FACTORY	Y YES		
FAILURE MODE- OUT OF TOLERANCE, BOOSTER I EMITTER TO BASE, TRANSISTOR MAS NOT FIRM RESULTING FROM IMPROMER HEAT DISSIPATION.	FAILURE HODE- OUT OF TOLERANCE, BOOSTER E NOULD HOT MULL. TRANSISTOR GS IN BOOSTER 2 YAW AMPLIFIER WAS SHORTED FROI Enitter to base, transistor was not firmly in contact with heat bink. Failure was attributed to bhorted transistor Ebulting from improper heat dissipation.	TRANSISTOR QS IN BOOM HEAT BINK. FAILURE	GS IN BOOSTER 2 YAW AMPLIFIER WAS SHORTED FROM . FAILURE WAS ATTRIBUTED TO SHORTED TRANSISTOR	F1ER 1443 C 244081E	SHORTED FROM D TRANSISTOR	
CORRECTIVE ACTION-URINDAN.	OWN. REQUEST FOR INSPECTION PROCEDURE TO DETECT IF TRANSISTORS ARE MAKING 6000 CONTACT WITH M	IE TO DETECT IF TRAMS	IISTORS ARE MAKIN	9 6000	ONTACT WITH H	
AUTOFILOT-BUUARE-A/B FILTER AND SERVOAMF	A-AB-OA-SEBSF CIRCUIT BOARD, TRANSIBTOR	FAR 27-41000-631	101F FACTORY 620703	¥ 0		***
FAILURE HODE-OUT OF TOW WE TRANSISTORS AND DICOU B. THESE MERE ATTRIBUTES	JE TOLERANCE OR SPECIFICATION-BOOSTER I ENGINE WOULD NOT MULL IN PITCH. FAILURE WAS DUE TO DEFECTI DIODES ON THE ASAZ BOARD, UTHER FAILURES IN YAW AND ROLL CHAMMELS OCCURRED DURING FAILURE ANALYSI SOUTED TO HEAT SENSITIVE TRANSISTORS, ALL FAILURES WERE ATTRIBUTED TO HEAT SENSITIVE ENGESA.	NGINE WOULD NOT NULL IN YAW AND ROLL CH FAILURES WERE AYTH	IN PITCH. FAILL	RE LAS O	UE TO DEFECTI FLURE ANALYSI ENSESA.	
CORRECTIVE ACTION-SMITE AUTOPILOT-SQUARE-A/B FILTER AND SCRWOAM®	CORRECTIVE ACTION-SMITCHED FROM COMERCIAL PART TO USARNZESA. TOPILOT-SQUARE-A/B A-99-04-3332F F LTER AND SERVOAMF AMPLIFIER E. T. E. AND SERVOAMF AMPLIFIER E.	FAR FAR E7-41000-#51	420703 DYESS	453 5	tano vigosponintantesponintalismones	804728
	JE TOLIDRANCE. THE SERVIAME, PACKAGE WAS REPORTED FAILED FOR A LOW ROLL INTEGRATOR DURING TEST. ON FAILURE WAS REPORTED AS LOW YAW AND PITCH FEEDBACK VOLTAGES. THESE FAILURES COULD NOT BE CONFIRME NALYSIS A NOISY TRANSFORMEN TE WAS REPLACED.	EPONTED FAILED FOR A H FEEDBACK VOLTAGES. CED.	I LCW ROLL INTEGR	ATOR BUR COULD NO	ING TEST, ON IT BE CONTINE	
CORRECTIVE ACTION-NOT P AUTOPILOT-SQUARE-A/S FILTER AND SERVOAM	NOT RNOWN. THE MOIST TE TRANSFORMER IS A RECURRENT PROBLEM AND IS UNDER INVESTIGATION. A-96-04-3336F FAR 860630 DYESS YES TRANSFORMER 27-41000-831 NO	RECURRENT PROBLEM A FAR 27-41000-831	ND IS UNDER INVE	3116A110	i	
FAILURE MODE-OUT OF TOO AM OUTPUT DIBTORTION DUE F TOLERANCE.	PAILURE MODE-OUT OF TOLERANCE, CANISTER IR/D FOR FAILURE TO MULL. DURING ANALYSIS THE MODULATOR ASSEMBLY EXHIBITED AN CUTPUT DISTORTION DUE TO A NOIST TRANSFORMER TE, THIS TRANSFORMER CAUSED THE PITCH STATIC GAIN OUTPUT TO BE CUT F TOLERANCE.	O MULL, DURING ANALY ANSFORMER CAUSED THE	SIS THE MODULATO PITCH STATIC GA	A ABSEND IN OUTPL	LY EXHIBITED	
CORFECTIVE ACTION-BURY ING NEW TEST WILL BE RET SAUES.	CORPECTIVE ACTION-SURVEY 316-52 AND SEL-62 VERE ISSUED CALLING FOR RETEGT OF T-2 TRANSFORMERS ALL TRANSFORMERS FAIL. No NEW 1257 WILL DE REPLACED BY TRANSPORMERS MITH S/N OVER 208-3187, THESE INCORPORATE IMPROVED NAMUFACTURING TECHN SUES.	LIMS FOR RETEGT OF 1 ROS-1187, THERE INC	-E TRANSPORMERS CORPORATE IMPROVE	ALL TRAN	SPORMERS PAIL	
					PAGE 0538	

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87.8TEM 8UB-87.9TEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	PRI VENDOR HAME OTH VENDOR PART HO	0
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF.	A-94-04-3338/7 AMPL IFIER-TRANSISTOR	FAR 27-41000-951	620630	DYESS	YES NO	***
FAILURE MODE- OUT OF TOLERANCE. NG CHECKOUT. THE PITCH SIGNAL AN CUIT FROM EMITTER-TO-COLLECTOR.	THE BERVOAM".	CANISTER WAS IR/O WHEN THE PITCH SIGNAL AMPLIFIER WOULD NOT LEAKY WESTRAM TRANSISTOR, THIS TRANSISTOR, EMIZSE HAD A NEAR	H SIGNAL A RAMSISTOR,	PLIFIER ENIESE H	MOULD NOT MULL BURI AD A MEAR BHORT-CIR	
CORRECTIVE ACTION-THE VENDOR, WE	VENDOR, WESTRAN, WAS ELIMINATED AS AN APPROVED SOURCE AND STOCK PURGED OF	H APPROVED SOURCE A	ND STOCK P		THEIR TRANSISTORS	0
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	A-99-04-3318F AMPLIFIER	FAR	31F 620630	DYESS	YES NO	98988
FAILURE HODE-FAIL DURING OPERATION. S- -212. FAILURE IN THE V-E PITCH CHANNEL.	ING OPERATION. SERVOAMPLIFIER CANISTER WAS SUBMITTED FOR FAILURE ANALYSIS ON IR 878307, PFAR -E PITCH CHANNEL WAS CONFIRMED.	JR WAS SUBMITTED FOR	FAILURE A	MLYSIS O	N IR 678307, PFAR	۵
CORRECTIVE ACTION-NOT KNOWN.	KNOWL.					
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	A-9H-04-3417-F BERVOAHFLIFIER TRANSISTOR	FAR 27-41000-831	979079	SCHILLIN YES	I YES HO	894137
FAILURE MODE-FAIL DURING OPERATION. MOT DETERMINED BUT SUSPECT IMPROPER	FAILURE MODE-FAIL BURING OPERATION. UNIT FAILED WHEN TRANSISTOR OF BOARD ASAR AMPLIFIER ONE SHORTED. CAUSE OF SHORT MOT DETERMINED BUT BUSPECT IMPROPER MOUNTING IN HEAT SINK	SISTOR OF BOARD ASAR	AMPLIFIER	90 H	IED. CAUSE OF SHO	
CORRECTIVE ACTION-A SPECIAL STUDY OF HEAT COVERAGE.	PECIAL STUDY OF HEAT SINK HOUNTING PI	SINK HOUNTING PROBLEMS WAS STARTED BUT DROPPED DUE TO LACK OF CONTRACTUM	BUT DROPPE	D DUE TO	LACK OF CONTRACTU	
AUTOPILOT-BAURE-A/B FILTER AND SERVOAMP	A-94-04-3332F Bervo-Amplifier	FAR E7-41000-831	94F	07 E 3 S	7E3 60/C NO	875750
FAILURE MODE-FAIL DURI OPERATED A TOTAL OF 81 TED FAILURE MAS MOT COM ME BASE.	FAILURE MODE-FAIL DURING OPERATION-SERVOAMPLIFIER PACKAGE MAS IR/D WHEN BOOSTER ENGINES WOULD NOT NULL. PACKAGE WAS OPERATED A TOTAL OF SIX MOURS DURING FAILURE ANALYSIS. AT NO TIME MERE ANY DUTPUTS OUTSIDE SPECIFICATION. THE REPORTED FAILURE MAS PROBABLY DUE TO AN ELECTRICAL COMMECTOR COMING LOOSE DURING SMIPMENT TO THE BASE.	MAS IR/D WHEN BOOSTER ENGINES WOULD NOT NULL, PACKAGE WAS NO TIME NERE ANY OUTPUTS OUTSIDE SPECIFICATION. THE REPOR AN ELECTRICAL CONNECTOR COMING LOOSE DURING SHIPMENT TO T	ER ENGINE: JIPUTS OUT	NOULD HE SIDE SPECI	OT NULL, PACKAGE W PPICATION, THE REP DURING SHIPMENT TO	2 8 ⊢
CORRECTIVE ACTION-NONE-PAILURE	E-FAILURE MAS NOT CONFIRMED.					
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15 JUN 1066	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TOPILOT SYSTEM-AIRBON	¥		ſ
8787EH 848-8737EH	TEST/REPORT HUMBER FAILED COMPONENT MANE	DIF DATA SOURCE PART NUMBER	VEHICLE BITE PRI	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	A-80-04-3881F AMPLIFIER	FAR R7-41861-608	SEDSES FACTORY	7E8 HO	*101**
FAILURE MODE-OUT OF TO ZENER DIODES CRE AND C	OLERANCE. COMPONENT EMIBITED OBCILLATIONS ON MAVEFORM TEST EOP 330-277. FAILURE MAS CAUSED BY CRS BEING NOI3Y.	ATIONS ON MANEFORM TE	81 EOF 850.E77. FAI	LURE WAS CAUSED BY	
CCRECTIVE ACTION-EOF 174 IMPROVED TYPES.	330.277 WAS REVISED TO ALLCM HIGHER NOISE LEVEL. WAP 2700 REPLACED ZENER DICDES CR2 AND CR3 M	NOIBE LEVEL. WAP 279	B REPLACED ZENER DI	COES CRE AND CRS M	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAM	A-90-04-3324F	FAN 27-41000-831	620615 DYESS	YE& 60/C	0
FAILURE MODE-OUT OF TO PITCH, UNIT WAS GIVEN	FAILURE MOE-OUT OF TOLERANCE. THE SERVOAMP, PACKASE WAS IR/D AS THE VERNIER EMSIME NO 1 SIMBALED TO HALF TRAVEL IN PITCH. UNIT WAS GIVEN EMAUSTIVE TESTIMG BUT FAILURE COLLD NOT BE COMFIRMED.	IRZD AS THE VERNIER I	HEINE NO 1 GIMBALED	TO HALF TRAVEL IN	
CORRECTIVE ACTION-TWK SEN	CORRECTIVE ACTION-TWK SENT TO BASE ADVISING THE PERSONNEL TO CHECK TEST EQUIPMENT AND/OR SWITCH 3 OF THE PROGRAMMER FOR POSSIBLE MALFUNCTION.	TO CHECK TEST EQUIPM	ENT AND/OR SWITCH 3	OF THE PROGRAMMER	
AUTOPILOT-SQUARE-A/B	A-9D-D4-3347F AMPLIFIER TKANSFORMER	FAR 27-41000-031	67E WTR 820610	763	1
FAILURE MODE-FAIL DURI	FAILURE MOCE-FAIL DURING OPERATION, BOOSTER ENGINES HENT HARD OVER IN PITCH, TROUBLE TRACED TO FAULTY TRANSFORMER T -E OM THE MODULATOR ASSENBLY-FILTER CIRCUIT BOARD ET-41858-401, NOISY TRANSFORMER T-E IS A RECURRING PROBLEM.	HARD OVER IN PITCH. 1 -401. NOI&Y TRANSFORM	ROUBLE TRACED TO FA	ULTY TRANSFORMER T	
CORRECTIVE ACTION-THESE	ME TRANSFORMERS MERE SLRVEYED OUT PER SURVEY INSRUCTIONS 118-8E AND 121-62.	R SURVEY INSRUCTIONS	110-6E AND 121-62.		
AUTOFILOT-BAUARE-A/B FILTER AND BERYONN	A-00-04-3271F DC AMPLIFIER	FAR E7-41301-603	SEGGOT FACTORY	763 50	***************************************
FAILURE MODE-DRIFT. DC ROR.	C AMPLIFIER GAIN DRIFTED OUT OF SPEC. FAILURE WAS NOT CONFIRMED AND WAS ATTRIBUTED TO HUMAN ER	. PAILURE WAS NOT CO	FIRHED AND MAS ATTR	IBUTED TO HUMAN ER	
CORRECTIVE ACTION-NOW	CORRECTIVE ACTION-NOWE. THE PAILURE WAS NOT CONFIRMED.				<u> </u>
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SYSTEX SLB-SYSTEX	TEST/REPORT MUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	BITE P	PRI VENDOR MANE OTH VENDOR PART NO	,
AUTOFILOT-SQUARE-A/B	A-88-04-3270-F	FAR R7-41361-608	420607	PACTORY VE	7E8 60/C HO	******
FAILURE MODE-ERRATIC OPERATION. NOT CONFIRMED AND WAS ATTRIBUTED	FAILURE MODE-ERRATIC GPERATION. BERVO CAN WAS REJECTED BECAUSE GACILLATIONS WERE SEEN ON BOOSTER 1 YAW. FAILURE WAS NOT CONFIRMED AND WAS ATTRIBUTED TO NUMAH ERROR. BEE IR 835184.	USE OBCILLATIONS WE!	NO N228 II	BOORTER 5	YAW. FAILURE WAS	
CORRECTIVE ACTION-NOME.	CORRECTIVE ACTION-NOME. THE FAILURE WAS NOT CONFIRMED.	dy ne my de de la companya de la com	-		And the second s	
AUTOFILOT-SQUARE-A/B	A-9M-D4-1261 F Transforedr Transforedr	FAR 27-41000-031	186	BAFB NO	909029	******
FAILURE MODE-SHORT ELECTRICAL. IN PITCH MODULATOR MAD SHORTED THIS DAMME MAS ATTRIBUTED TO OM.	RT ELECTRICAL, JERVO CAN MAS REJECTED FOR SHORT BETHEEN 305 UE/JZ PIH FF AND GROUND. TRANSFORMER TI OR MAD SHORTED PRIMARY WINDINGS, PRIMARY WINDINGS OF TRANSFORMEF TI IN YAU-ROLL MODULATOR WERE OPEN ATTRIBUTED TO APPLICATION OF HIGH VOLTAGE TO SERVO CAN IMPUTS FUE TO WIRING ERROR IN UMBILICAL J-B	HORT BETHEEN 305 UE. NOINCS OF TRANSFORM TO BENYO CAN INFUTS	22 FIN FF	AND GROUND W-ROLL HO HING ERROR). TRANSFORMER TI DULATOR MERE OFEN IN UMBILICAL J-B	
CORRECTIVE ACTION-WIRE	CORRECTIVE ACTION-WIRTHE ERROR IN J-BOX WAS CORRECTED BY BASE PERSONNEL. NO OTHER CORRECTIVE ACTION.	ISE PERSONNEL. NO OTI	Ch CORREC	IVE ACTIO	•	
AUTOPILOT-SQUARE-A/B	A-9M-D4-3201F AMPLIFIER TRANSIBTOR	FAR 27-41000-631	47F	5475 7E	7E3 NO	886563
FAILURE MODE- OUT OF TO RECEIVED ON CARDS 481 AN N CLEANED: TRANSISTOR FU	FAILURE MODE- OUT OF TOLERANCE. THE BOOSTER MANBER I YAW AMPLIFIER INDICATED A STEADY-STATE UNBALANCE. Ecciyed ch cards agi and ags of Deck adi. Failume has due to transistor as excessive collector to base i cleamed, transistor functions were restored to mornal.	PLIFIER INDICATED A O TRANSISTOR OS EXCE	STEADY-ST/	TE UNBALA	KE. NO-GOS MERE NASE LEAKAGE. MHE	
CORRECTIVE ACTION-EFFEC	CORRECTIVE ACTION-EFFECTIVE 1 JUNE 1942, GD/C PURCHASED RHEEN/RAYTHEON TRANSIBTORS, TYPE EMBB, WITH LATESY DESIGN HANGE FEATURING IMPROVED RELIABILITY.	EH/RATTHEON TRANSIB:	ORS, TYPE	EMSS. KI	IN LATEST DESIGN	
AUTCPILOT-SAUARE-A/B FILTER AND SERVOAMF	A-88-04-3259F Circuit Beard-Diodes	FAR 27-41361-605	525228	FACTORY NO	3/9 3 0	0, 29.0
FALLURE MODE-OUT OF TOL	FAILURE MODE-OUT OF TOLERANCE, CIRCUIT BOARD WAS REJECTED WHEN TOP PACKAGE FAILED EOP 330.250 PARA 8.7. TRANSISTORS 81 42 AND 43 MERE SHORTED EMITTER TO COLLECTOR. DIODES CRI CRE AND CRS MERE OPEN. THIS DAMAGE WAS ATRIBUTED TO THE APPLICATION OF MORE THAN FORTY VOLTS TO THE SIGNAL IMPUT.	HEN TOP PACKAGE FAIL	ED EOP 330	LESS PARA	4.7. TRANSISTORS	

PA&C 0938

CORRECTIVE ACTION-PACTORY PERSONNEL CAUTIONED TO CREENE CORRECT PROCEDURES AND VOLTAGES DURING TROUBLE SHOOTING.

SENERAL DYNAMICS CONVAIR DIVISION

13 Jun 1988

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	DIFFICULTIER REVIEW-AUTOFILOT SYSTEM-AIRSORME	TOPILOT SYSTEN-AIRSON	¥			-	
STSTEN BUG-STSTEN	TEATAEPORT MUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE DATE DIF	817E 71ME DIF	# 0 # 1	VENDOR NAME VENDOR PART NO	
AUTOPILOT-REUARE-A/S FILTER AND SERVOANF FAILURE MODE-OUT OF SI FOUND. CORRECTIVE ACTION-MOM	A-AB-04-3300 R7-41859-801 P SPECIFICATION, FAILED EOF 339.278 PARA 8.18.1. FAILURE HAS NOT CONFIRMED. NO MALFUNCTIONS MERE NOME-FAILURE NOT CONFIRMED.	FAR 27-41859-801 4 8:16:1. FAILURE WA	820308 NOT COM	FACTORY RMED. NO	YES 60/C NO MALPUNCT	60/C UNCTIONS NERE	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF FAILURE MODE-ELECTRICAL	A-A8-04-3E00F AMPLIFIER COMMECTOR E7-41361-805 AN AMPLIFIER COMMECTOR E7-41361-805 AL SHORT, DURING AN ALTUS BREAK OF INSPECTION, A HISCOMMECTION WAS MADE RESULTING	FAR E7-41361-805 HAPECTION, A HISCORM	420304 CTION MS	AAFB MADE RESU	2 A 11	0 H	***************************************
CH OUTPUT, THE IMPROFER E. C. CORP.CTI.VE ACTION-NOME.	CH OUTPUT. THE IMPROPER CROSS COMMECTION AFTECTED AMPLIFIER NO. 1 RESULTING IN A SHORTED TRANSISTOR AND AN OPEN BLOD E. CORRECTIVE ACTION-NOME.	N NO. 1 RESULTING IN	8 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1 2 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	₹ *	AN OPEN UIO	
AUTOFILOT-SQUIRE-A/B	A-99-04-3283C AMPLIFIER	FAR R7-41361-605	1 60304		\$ Q	3/05	695933
FAILURE MODE-OUT OF TELTRIS WAS PEAFORNED BECCORECTIVE ACTION-UNK	7 TOLEGANCE-SERVOAMMLIFIER WAS REJECTED IN THE FACTORY, NO REASON FOR REJECTION WAS GIVEN, NO ANA RECAUSE THE ASSEMBLY WAS REMORKED AFTER REJECTION. JAKNOMM.	IN THE FACTORY, NO F	EASON FOR	REJECTION	\$	GIVEN. NO ANA	
	A-9H-C4-3218-F	FAR 27-41000-631	\$0\$040	E 73	20	40/C £7-41000-631	84007
FAILURE MODE-CONTAMINA R MAS CONTAMINATED BY	FAILLIRE MODE-CONTANTMATTON. A MERCLIRY VAPOR TEST INDICATED THE PRESENCE OF MERCLRY WITHIN THE CANISTER. THE CANISTE	D THE PRESENCE OF NEX	CURY METHO	3 1 2	3; c 17	R. THE CANISTE	
CORRECTIVE ACTION-THE CURY MANDMETERS NERE RI	CORECTIVE ACTION-THE PRESENCE OF HERCHRY IN THE CANISTER WAS QUESTIONABLE. THE PACKAGE WAS SCRAPPED. LEAK TEST MER CHRY MANCHERS MERE REMOVED FROM THE FACTORY AND PRODUCT SUPPORT LEAK TEST AREAS. EFFECTIVE 7 MAY 1948.	CANISTER WAS QUESTIONABLE. THE PACKAGE WAS PRODUCT BUPPORT LEAK TEST AREAS, EFFECTIVE	HE PACKAGE	MAS SCRAF	SCRAPPED. 7 MAY 1942	LEAK TEST MER R.	
AUTOFILOT-SQUARE-A/B	A-99-C4-3392F HODULATOR ASSEMBLY-FILTER TRANSFOR	FAR OR 27-41359-407	460803	FACTORY	<u> </u>		·
FAILURE MODE- FAILURE DURING OP MORT CIRCUIT IN TRANSFORMER T-8.	FAILURE MOSE- FAILURE DURING OPERATION. THO CIRCUIT BOARDS FAILED DURING CHECKOUT. TROUBLE WAS TRACED TO MULTIPLE S NORT CIRCUIT IN TRANSFORMER T-S.	8 PAILED DURING CHECK	OUT. TROU	HE 189 TO	800	TO MULTIPLE S	
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CONVAIR DIVISION

T. April 1980

	DIFFICULTIES REVIEW-AUTOFILOT STRIEM-AIRBORNE	FILOT STREM-AIRBOR	ž.				ſ
SYSTEM SUB-SYSTEM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	317E TIME DIF	PR I	SITE PRI VENDOR HANE TIME DIF OTH VENDOR PART NO	
CORRECTIVE ACTION-VENDORI RMER MINDINGS. AN INDUCED PROCEDURF. SURVEY INSTRUC	VENDORS HAVE PERFORATED THE FLYHEES OF THE BODBIN TO FACELITATE IMPREGNATION OF THE INMER TRANSFO. MDUCED VOLTAGE TEST OF DOUBLE-VOLTAGE DOUBLE-PREGUENCY WAS ADDED TO THE RECEIVING INSPECTION TEST INSTRUCTIONS 116-62 AND 121-62 REMOVED FAULTY T-2 TRANSFORMERS FROM THE TOP PACKAGES.	E BOBIN TO FACELIT BLE-PREGUENCY WAS A ULTY T-E TRANSFORME	ATE INPREGODED TO THE FRCH TH	NATION OF E RECEIVI	NC I	INMER TRANSFO NSPECTION TEST 8.	
AUTOPILOT - SQUARE-A/B	A-00-04-3501F	FAR 27-41339-801	\$60502	FACTORY	20	3/09	0.7547
FAILURE MODE-OUT OF TOLET CHECKOUT, PROBLEM MAS NOT	OF TOLERANCE, BOOSTER MANBER 1 PITCH STATIC GAIN READINGS WERE TOO LOM DURING FACTORY SUBASSENBLY ans not confirmed.	C GAIN READINGS MEN	E 100 LOM	DURING FA	10TOR	Y SUBASSEMBLY	
CORRECTIVE ACTION-NOME.	CAUSE OF PROBLEM COALD NOT BE DETERMINED.	HINED.					
AUTOFILOT-BOURE-A/B FILTER AND SERVOAMP	A-99-04-32-0C AMPLIFIER, OC	# - ## # # # # # # # # # # # # # # # #	650450	FACTORY	ů g		11016
FAILURE MODE-OUT OF SPEC AS PARTIALLY REMORKED FRO	FAILURE MOSE-OUT OF SPECIFICATION OR TOLERANCE. FAILED EOP 330.280 B. NO ANALYBIS MAS PERFORMED BECAUSE COMPONENT W AS PARTIALLY RENCHKED FROM PREVIOUS FAILURE. THIS FAILURE NAS DUE TO INCOMPLETE RENORM.	330. EAD B. NO ANALY B DUK TO INCOMPLETE	BIS WAS PERCORK.	RFORMED B	ECAU	SE COMONENT W	······
CORRECTIVE ACTION-MOME.	NO AMALYSIS PERFORMED.						
AUTHPILOT-SQUARE-A/B FILTER AND SERVCAMP	a-om-04-3e99f Amplifier-transistor	FAR E7-41000-831	17F 620425	********	ž 8		207560
FAILURE MODE-OUT OF SPECI HOMEVER, PITCH STAILG GAI HE FITCH D.C. AMP MERE HE	FAILURE MODE-OUT OF SPECIFICATION. BUSTAINER YAM STATIC GAIN WAS OU'. OF SPEC ON VEHICLE. FAILURE WAS NOT CONFIRMED. Homever, pitch static gains were out of spec due to noisy pitch demo transformer. Also, transistors as and ga in t He pitch d.c. amp were heat sensitive. Transistors were ratheon engesa.	N WAR OUT OF SPEC C 11TCH DEMOD TRANSFOR HEON ENSERA	N YEMICLE.	FAILURE TRANSIST	\$ 5 5 5	NOT CONTINUED.	
CORECTIVE ACTION-TRANSISTOR RE REMOYED FROM AUTOFILOTS BY	CORRECTIVE ACTION-TRANSISTOR TYPE SMITCHED FROM COMMERCIAL TO USABNSESA, MOISY TRANSFORMER MAS OF GO/C MAKE, ALL ME E REMOYED FROM AUTOFILOTS BY SURVEY INSTRUCTIONS 118-62 AND 121-62.	TO USAENSESA. MOISY 121-62.	TRANSFORM	Cs Ms Of	3	C MAKE, ALL WE	
AUTOFILOT-SQUARE-A/B FILTER AND BERVOAM	A-01-04-3425-F Abblifie	FAR E7-41003-831	£7¢ 6£04£3	AL TUS	ž ž	2/9	884128
FAILURE HOCE-OUT OF TOLES THE CORRECT RATE,	OF TOLERUNCE, BERVOAMPLIFIER REPORTEDLY FAILED WHEN BOOSTER MARBER ONE ENGINE DID NOT TRAVERSE AT	ILED WHEN BODGTER N	WASER ON	ENGINE DI	9	TRAVERSE AT	
CORRECT; VE ACTION-NOME, P	NOME, FAILURE NOT CONTRINED.						
						FA6E 0341	
The state of the s							,

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SYSTER SUB-SYSTEN	TEST/REPORT MUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	817E TINE DIP	PRI	VEHICLE SITE PRI VENDOR PART NO	
AUTOPILOT-SAUARE-A/B FILTER AND SERVOAMP	A-8N-04-3E5EC AM*_1F1ER	FAR 27-4100g-859	620424	AAFB	Š m		*****
FAILURE MODE-FAIL DURING LUGE WAS ATTREBUTED TO DI NO REFERENCE TO THE BER CORRECTIVE ACTION-MOME.	FAILURE HODE-FAIL DURING OPERATION. MAIN GYRO CAN WAS REJECTED BECAUSE ENGINES COULD NOT BE MULLED IN YAW. THIS PAI Luge was attributed to discrepancy in associated servoamplifier. No pailure amalysis was performed on this 6780 can. No reference to the bervoamplifier par was given. Corpective action-nome, pailure not compired.	ITED BECAUSE ENGINES TIER, NO FAILURE ANA	COULD NOT	BE HULLE PERFORMED	# #	THIS GYNO CAN.	
AUTOPILOT-SQUARE-A/B FILTER AND BERVOHM	A-99-D4-34D4F FILTER-ELECTRICAL	FAR 27-41645-1	62 0420	FACTORY	F 5	7E8 48/C NO	447327
FAILUME MODE-OUT OF SPEC	SPECIFICATION. VERNIER ROLL FILTER FAILED EOF 350 AND 536 FOR HAVING HO BOOMTER MANBER E PITCH 1818 DETECTED NO FAILURES IN THE CIRCUIT BOARD.	ED EOF 330 AND 336 I BOARD.	FOR HAVING	04 CH	ş	CHEER # PITCH	
CORRECTIVE ACTION-FACTOR	CORRECTIVE ACTION-FACTORY SUPERVISION ADVISED OF NON-CONFIRMED FAILURE. GD/C WILL MONITOR THIS TYPE OF UNCONFIRMED FAILURES TO DETERMINE IF A PROBLEM AREA EXISTS IN THE PACTORY.	HED FAILURE, GO/C W	1LL #0N1T0	# THIS TY	4	F UNCONFINED	
AUTOFILOT - SALARE - A/B FILTER AND BERYOAM?	A-46-C4-3414-F VERNIER ROLL FILTER	FAN E7-41645-1	027028	FACTORY	ž g	YES 60/C NO	2
FALLINE WOOE-FAIL DURIN	FAILURE MODE-FAIL DURING OPERATION. FAILED TO OPERATE BY MAVING NO BOOMTER NAMER TWO PITCH OUTPUT.	AVINS NO BOORTER NAME IN TERMS.	14 OFF 120	7CH 0017	Ė		
AUTOFILOT-SQUARE-A'S	A-90-04-3184F AMPLIFIER	FAR 87-41000-831	12F 9g0417	ž	88	5/09	02850
FAILURE MODE-PAIL DURING . THE FAILURE MAB DUE TO IM	FAILURE MODE-FAIL DURING OPERATION-DURING NAPCHE CHECKOUT CARDS 451 AND 461, THE NEWO ARPLIFIER PRODUCED NO OUTPUT , THE FAILURE COULD NOT SE COMTRHED, THE CANISTER PERFORMED WITHIN SMECIFICATION, T.A. PROBABLE CAUSE OF THE REPORT OF FAILURE WAS DUE TO IMPROPER MAPCHE READOUT OR MAMAN ERROR.	CARDS 451 AND 461. TO WITHIN SPECIFICATI	¥ 9.5. ¥8	WALIFIER	8 y	UCED NO OUTPUT OF THE REPORT	
CORRECTIVE ACTION-LAKINDAN.	756.			-			

GENERAL L. MHICE CONVAIR DIVISION

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11 JUN 1986

9901 NOT 81	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBORN	¥		,		1
SYSTEM SUG-SYSTEM	TEBT/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE Date DIF	817E TIME DIF	N TO	VEHICLE SITE PRI VENDOR MANE	
AUTOFILOT-SQUARE-A/B	A-89-04-8864-F	FAR R7-41358-601	917029	FACTORY	Q 11	3/ 0 9	
FAILURE MIDE-DRIFT, SERV FOUND IN THE SENJO CANIS	FAILURE MIDE-DRIFT, SERVO CANISTER FAILED EOF 350.200 PARA, 8.11.1. FAILURE MAS NOT VERIFIED. MO DISCREPANCIES MERE Foamd in the sen-to canister or test equipment, Pailure was attributed to loose test equipment commections.	B.11.1. PAILURE NAI ATTRIBUTED TO LOOSE	HOT VERI	FIED. NO PHENT CO	D13CB	EPANCIES MERE ONS.	
CORRECTIVE ACTION-NOME.							
AUTOFILOT-SQUARE-A/B	DA707/E1-640-01-15 VIRING	COMPOSITE-PROVDPL	156	574E-1	YES 6	2/Q 3	***************************************
FAILURE MODE-DRIFT, B1 A INVESTIGATION REVEALED MI	FAILURE MODE-DRIFT. BI AND BE YAW INTEGRATORS DRIFTED OUT OF SPECIFICATIONS DURING AUTOPP; DRIFT. TEST POST TEST INVESTIGATION REVEALED MISSING GROUND WINE ON YAW INTEGRATORS.	F SPECIFICATIONS DUR	ING AUTOR	P. C. DRA	3	ST POST TEST	
SYSTEM EFFECT-IMPROPER ANALOG SIGNALS.	MALOS SIGNALS.						
WEHICLE EFFECT-COMPOSITE DELAYED.	: DELAYED.						
CORRECTIVE ACTION-UNKNOWN.	*						
AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	RA-98-04-3186-F	FAR 27-41000-031	1330	E.J.	Y ON	TRANSITRON ELE	1265
FAILURE MODE-OUT OF TOLE RE MAS CONTINED AND MAS RLY MANUFACTURED.	T OF TOLERANCE-DURING CHECKOUT THE MINUS 21.3 VDC TOLERANCE MAS FOLND TO READ MINUS 14VDC. THE FAILU AND MAS DUE TO A DEFECTIVE DICDE (BV6D6)) IN THE ASAL PONER SUPPLY CIRCUIT BOARD. THE DICDE MAS POO	S VOC TOLERANCE WAS N THE ABAI POMER BUT	FOUND TO FLY CIRCU	READ HING IT BOARD.	54 14 V	DC. THE FAILU	
CORRECTIVE ACTION-RAR MR PROCEDURES. VENDOR DID IS ONT.	CORRECTIVE ACTION-RAR WRITTEN TO THE VENDOR TO YAKE ACTION TO IMPROVE THEIR MANUFACTURING TECHNIQUES AND INSPECTION PROCEDURES. VENDOR DID IMPROVE QUALITY CONTROL OF DICOE ASSEMBLY. A BETTER DICOE (IMPDS4) IS NOW IN USE IN THE FACT NY.	TO IMPROVE THEIR MAN	UFACTURIN E (INEDSA	6 TECHNIG	VE3 A IN US	TECHNIQUES AND INSPECTION IS NOW IN USE IN THE FACT	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	A-48-04-3180F CIRCUITBOARD	FAR 27-41643-603	660318	FACTORY	₹		***************************************
FAILURE MODE-ERRATIC OPE THE PLUS VERNIER ROLL FIL. T THE PROBLEM AREA IS IN	FAILURE MODE-ERRATIC OPERATION, DUMING FACTORY PRODUCTION VIBRATION TEATING PER EOP 350-291 OF THE SERVOAMPLIFIER. ME PLUS VERHER ROLL FILTER ON SUBJECT CIRCUIT BOARD WAS ERRATIC. THE PAILURE COULD NOT BE VERIFIED. IT APPEARS THA THE PROBLEM AREA IS IN THE PACTORY FINAL CHECKOUT FACILITY.	IBRATION TESTING PER LATIC: THE PAILURE C	EDF 330- OULD NOT	ES OF THE VERIFIE	5. 2. 3.	VOAMPLIFIER, T APPEARS THA	
CORRECTIVE ACTION-UNKNOWN	M-UMENISM. FACTORY SUPERVISION WILL CALL ON DESIGN AND RELIABILITY ENGINEERS TO WITNESS ANY FUTURE TYPE AT THE FACTORY IN ORDER TO IDENTIFY AND DEFINE THE PROBLEN AREA.	DESIGN AND RELIABIL) DEFINE THE PROBLEN	ITY EMBIN	ECR8 10 W	1168	S ANY PUTURE	

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11 JUN 1186

****	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	OFILOT SYSTEM-AIRBOR	¥			
3.27CH 8\Q-9737EH	TEST/REPOST NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF 71	811E PR1	SITE PRI VENDOR NAME	facility of the same of the sa
AUTOPICOT-SAUGRE-A/B	A-9N-D4-314EF CIRCUIT BOARD-TRAMSIBTOR	FAR RT-41000-831	25F 3C	SCHILLIN HO		***
FAILURE MOSE-SHORT (ELE B 43 AND 45 GOTH EN494) TO THE CANISTER. THE TO	T (ELECT) THE VERHIER EMJINE 1 FAILED TO OPERATE IM YAM. PAILURE AMALYBIB REVEALED THAT TRANSIBTOR ENGSB! WERE SHORTED, EMITTER TO COLLECTOR. THE TRANSIBTORS FAILED DUE TO A SHORTED OUTPUT EXTERNAL THE TRANSIBTORS ARE A PART OF CIRCUIT BOARD AGAI.	OPERATE IM YAM. PAIL t. THE TRANSIBTORB FA IND AGAI.	URE ANALYBIS ILED DUE TO	REVEALED A SHORTED	DUTPUT EXTERNAL	
CORRECTIVE ACTION-LINKING TROUBLESHOOTING WITH AVI	CORRECTIVE ACTION-LAGNOWN. ADVISED THAT COMPLEX PERSONNEL EXERCISE CAUTION DURING PERFORMANCE OF SYSTEMS CHECKS OR Troubleshodting with a/P servo amp Canister Pomér on and also the Proper use of test equipment.	EXERCISE CAUTION DUR	ING PERFORMA TEST EQUIPH	NCE OF BYS	IENS CHECKS OR	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAM	A-B6-04-3140F CIRCUIT BOARD-TRANSISTOR	FAR 27-41000-831	1F 87	BYCAMORE NO NO		********
FAILURE MODE- FAIL DUR! YAW CHAMEL, CHECKOUT (ED THAT THE FAILURE MAS T- CIRCUITED OUTHUT EXTE	FAILURE MODE- FAIL DURING CPERATION. PURING X-1 BAY CHECKOUT, 4 MALFUNCTION WAS NOTICED IN THE VERNIER ENGINE NO. R TAM CHANNEL, CHECKOUT OF THE CANISTER SHOWED NO CUTPUT FROM THE VERNIER NO. R TAM CHANNEL. FAILURE ANALYSIS CONCLUD D THAT THE FAILURE WAS CAUSED BY A MELTED EMITTER LEAD ON TRANSISTOR 63 (RMSS) IN CIRCUIT BOARD ASAS DUE TO A SHORT - CIRCUITED OUTPUT EXTERNAL TO THE CANISTER.	NI, 4. MALFUNCTION MA NI THE VERNIER NO. E TRANSISTOR 63 (EMBBE	MOTICED IN YAM CHANNEL.	THE VERNI FAILURE A WOARD A&A	ER EMGINE NO. E WALTSIS CONCLUD I DUE TO A SHOR	
CORECTIVE ACTION-LAKNOWAL	Oet.					
AUTOPILOT-SQUARE-A/E FILTER AND SCRYCAMP	3P-2D-44-3087-F AMPL FEER	FAR 27-41000-842	11ED WTR	₹ ₽₽	3/05	
FAILURE MODE-ERRATIC OF FOUND IN GYRO PACKAGE, P	FAILURE MOE-ERRATIC OPERATION-DURING LOOP TEST SUSTAINER ENGINE MOVED IN YAW DIRECTION INTERMITTENTLY. NO FAILURE Found in Gyro Package, Malfunction Progrably due to enratic operation of test esuipment.	ENGINE MOVED IN YAM OPERATION OF TEST ES	DIRECTION IN UIPMENT.	TERHI TTENT	Y. NO FAILURE	
CORRECTIVE ACTION-MONE-	NOWE-REPORTED FAILURE NOT CONTINNED.				de la la la la la la la la la la la la la	
AUTOFILOT-BOUARE-A/B FILTER AND BERVOAM	AD62-0013/DA648 AMPL 2P 1 KR	COMPOST TE-FRD/DPL EF-41000-849	1120 PA	PALCI-E YES	J/05	i i
FAILURE MODE-FAIL DURIN COL IN THE LOOP YEST.	DURING OPERATION-SPURIOUS SUSTAINER ENGINE MOVENENTS IN YAM NERE MOTED AT EDG AND ELG SECONDS (SE	NE MOVEMENTO IN YAM	MERE NOTED A	T EDS AND	116 BECOMDS (SE	
SYSTEM EFFECT-IMPROPER	IOPER AMALOS SISNALS.					*********

PAGE 0344

CORRECTIVE ACTION-SERVO AMPLIFIER MAS REPLACED. (FAR 80-04-3087)

WENTELE EFFECT-NOME.

CONVAIR L. JISTON

	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	MILOT BYSTEN-AIRBON	4 C C C C C C C C C C C C C C C C C C C	* ***
	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VENICLE BITE PRI VENDOR NAME.	NAME TO
AUTOFILOT-SQUARE-A/B	A-A8-D4-3139F CIRCUIT BOARD	FAR R7-41658-5	SECRET BAN DIEG NO NO NO	•
FAILURE MODE-FAIL TO O FAILURE COULD MOT BE C D COULD POSSIBLY BE DUE THE TEST EAUIPMENT.	O OPERATE AT PRESCRIBED TIME, DURING FACTORY PRODUCTION VIBRATION THE ROLL FILTER HAD NO OUTPUT. IE CONTINED, NO FAILURE MAS FOUND IN THE SUBJECT CIRCUIT BOARD. THE FAILURE OF THIS CIRCUIT BOARD DUE, TO A MISMATCH IN THE ROLL-AMPLIFIED MODULE OR A DISCREPANCY BETWEEN THE PROCEDURE AND USE OF	TORY PRODUCTION VIB E SUBJECT CINCUIT BO MODULE OR A DISCREY	RATION THE ROLL FILTER HAD NO OU MARD. THE FAILURE OF THIS CIRCUIT NAMEY BETWEEN THE PROCEDURE AND U	S BOAR.
CORRECTIVE ACTION-LARNOMA.		S CALLED TO WITHERS	DESIGN AND RELIABILITY EMCINEERS CALLED TO WITNESS FUTURE FAILURES OF THIS TYPE AT THE AND DEFINE THE PROBLEM AREA.	THE #
AUTOFILOT-SQUARE-A/B	A-88-04-3132F CIRCUIT BOARD-FILTER	FAR ET-4100E-835	1F 8YC YES 820207 NO	68/045
FAILURE MODE-FAIL TO CONTOR (SHRD) CIRCUIT, AN ET-04948-1 IN CHANNEL A POCH SOLDER CONNECTION	FAILURE MODE-FAIL TO CHERATE AT PRESCRIBED TIME, THE FAILURE WAS A REPORTED NO-60 FROM THE SPIN MOTOR ROTATION DETE CTOR ISHED) CIRCUIT, ANALYSIS REVEALED THAT THE FAILURE MAS IN THE SHAD CIRCUIT, TESTS INDICATED A FAULTY FILTER PAN ET-DASAS-1 IN CHAMMEL S ON CIRCUIT BOARD PAN ET-43220-S, THE CAUSE COULD HOT BE DETERMINED BUT MAS PROBABLY DUE TO A POOR SQUDER COMMECTION ON PIN 1 OF THE FILTER CORRECTED DURING DISASSEMBLY.	RE MAS A REPORTED HO IN THE SAMD CIRCUIT HE CAUSE COULD HOT B LATHG DISASSEMBLY.	D-GO FROM THE SPIN NOTOR ROTATION I. TESTS INDICATED A FAULTY FILTE SE DETERNINED BUT WAS PROBABLY DU	0 4 A A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A
CORRECTIVE ACTION-THIS ESIGN AND QUALITY. AS O WE THE NEW-S FILTER.	CCKRECTIVE ACTION-THIS FILTER IS BEING REPLACED BY A NEW TYPE P/N 27-04948-3 WHICH IS AN IMPROVED VERSION BOTH IN D SIGN AND QUALITY. AS OF 4-10-62 HONE OF THE -1 FILTERS MERE IN STOCK. ALL BOARDS HANGFACTURED AFTER 4-10-82 WILL HA E THE NEW-S FILTER.	FPE F/N 27-04948-3 V E IN STOCK, ALL BOAR	HICH IS AN IMPROVED VERSION BOTH IDS NAMERCTURED AFTER 4-10-62 MI	
AUTOFILOT-SQUARE-A/B	A-A9-04-3113F YAM FILTER CAPACITOR	FAR 27-41359-801	REDEGA FACTORY TES	# ST L # 8
FAILURE MODE-ERRATIC O THAT CARCITOR CR-3 HA INSTALLATION.	C OPERATION, YAW FILTER IN CIRCUIT BOARD DISPLAYED AW ERRAIIC OUTPUT, FAILURE ANLYSIS INDICATED HAD A PARTIAL BHORT, POBSIBLY CAUBED BY CAPACITCR WIRE ENGS BEING PULLED AND AGGRAVATED BY HAND	D DISPLAYED AM ERRAI 7 CAPACITUR WIRE ENC	AM ERRATIC OUTPUT. FAILURE ANALYSIS INDICATED Wire Ends being Pulled and Afgravated by Hand	CATED HAND
3/03-4	CORRECTIVE ACTION-GO/C PERSCHMEL MERE INSTRUCTED TO PROPERLY FORM WIRE ENDS OF RESISTORS CAPACITORS AND DICDES.	T FORM WIRE ENDS OF	' RESISTORS CAPACITORS AND DICOES	•
AUTOFILOT-SAUARE-A/B	A-94-04-3121F AHPLIFIER: T'ANSISTOR	FAR 27-45200-1	31F DAFB NO 620131 NO	
FAILURE MODE-FAILED DU AMPLIFIER.	DURING CPERATION. TRANSISTOR 63 (EMSS) WAS DAMAGED BY AN EXTERNAL SOURCE OF POMER TO THE SERVO	MA DAMAGED BY AN	EXTERNAL BOUNCE OF POMEN TO THE	0, 23
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	and a series of the series of		PASC	0548

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	PRI VENDOR HANE OTH VENDOR PART NO	DATED PMAR. 18		D A LOOSE ENLY		2/95	710N OF 115 VA	OUELESHOOTING.	og	CHAMBEL, PATLU			STING. PAILURE E ON DISCREPAN		PAGE 0548
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and the second s	SITE TIME DIF	AS 70-506	FACTORY	451 B T OR .	rons.	ETR	87 H1 SAP	ECKOUTS A	FACTORY	VCRNTER/P		FACTORY	S CANIST		
¥.	VEHICLE DATE DIF	ON REF (T)	921039	11104. TRAN	OF TRANSIS	121D 420125	SLY CAUSED	SYSTEM CH	4201 EE	NLANCE TH Y		111020	UTPUT DURIN		
HOPILOT SYSTEM-AIRBON	DIF DATA BOURCE PART NUMBER	ING TERTS WITH POMER	FAR 87-41361-605	M PACKAGE LEVEL VIBRA	COMERCIAL VERSIONS C	FAR 27-41000-847	HAMEL-FAILINE PROBAE	CARE DURING COMPLEX	7AR 27-41359-861	EXCESSIVE OUTPUT UPB/ FILTER-(AC AND DC ASS	, in a second second second second second second second second second second second second second second second	FAR 27-41365-805	ROLL FILTER HAD NO ON OF BOARDS IN THE ROLL		
DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER PAILED COMPONENT NAME	PERSONNEL MERE CAUTIONED ABOUT MARING TESTS WITH POMER ON REF (TWXST8-588 SOF	A-88-54-8118" CIRCUIT BOARD TRAMBIBTOR	. CIRCUJI BOARD WAS REJECTED DURING PACKAGE LEVEL VIBRATION. TRANSISTOR 6-1 HAD A LOOSE ENIT 82 had a crack.	HAS NOTIFIED TO STOP DELIVERING COMERCIAL VERSIONS OF TRANSISTORS.	RA-98-04-3077- / ADM-LFTER	FAILURE NODE-FAIL DURING OPERATION-ZERO GUTPUT PROM YAM CHAMMEL-FAILURE PROBABLY CAUSED BY MISAPPLICATION OF 113 VA : 40 CPs to THE CAMISTER.	PERSONNEL CAUTIONED TO USE EXTREME CARE DURING COMPLEX BYSTEM CHECKOUTS AND TROUBLESHOOTING.	A-A9-04-5114F Filter	FAILURE WOSE-FAILED DURING OPERATION-REJECTED BECAUBE OF EXCESSIVE OUTPUT UPBALANCE IN VERNIER/PITCH CHAMMEL, PAILU Re not confirmed, possible hishutch in modulator assenbly filter-(ac and DC assenbly filter module).	IE NOT CONFIRMED.	A-A9-04-5138F	FAILURE HODE-FAI. TO GPERATE AT THE PRESCRIBED TIME, THE ROLL FILTER HAD NO OUTPUT DURING CANIDTER TESTING. FAILURE NOT CONTRAKD, FAILURE COULD POSSIBLE BE DUE TO HISHATCH OF BOARDS IN THE ROLL FILTER-AMPLIFIER MODULE OR DISCREPAN IES IN PROCEDURE OR TEST ESUIPMENT.	**	
9965 WAT 81	87.875.K 30.0 - 87.87.EM	CORVECTIVE ACTICH-BDZC P	AUTOFILOT-SQUARE-A/B	FAILURE MODE-STRUCTURAL. TER LEAD AND TRANSISTON &	CORRECTIVE ACTION-VENDOR	AUTOFILOT-SQUARE-A/P	FAILURE NODE-FAIL DURING C 89 CPS TO THE CANISTER.	CORRECTIVE ACTION-117E P	AUTOSTLOT-SQUARE-A/L	FAILURE MODE-FAILED DURE RE MOT COMFIRMED, POSSIBL	CORRECTIVE ACTION-FAILURE NOT CONFIRMED.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-FAI. TO GPERATE AT THE MOT CONFIRMED, FAILURE COULD POSSIS CIES IN PROCEDURE OR TEST EAUTHENT:	CORRECTIVE ACTION-UNKHOOM.	

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PET VENDOR NAME OTH VENDOR PART	7E\$ 60/C NO		YES 60/C	BOOSTER TA	ED MIERE (ELIMINATI REJENTS.	YES 40/C	VE. CAUSTI	יוט נגונ	7£\$ 60/C	READOUT.		
VEHICLE SITE PF.I VENDOR PART NO	FACTORY Y		2 X	ED IN THE .	6 BE APPLE D TOOLS TO TING RESULE	100	INDPERATI	ERE INITIA	2 M	CRESTORE		
VEHICLE DATE DIF	920110		665 10	NS INDICATI Y ASA1 BOA!	MAL COATING LES CHANGEI FORMAL COA	1040	MEL BECAME	MSISTOR, M	40£	MED AN INTI CANIBIER.		
DIF DATA BOVROS PART NUMBER	N-81747-LW	N OS TERROS.	FAR 27-41000-831	IN ERKATIC GUTPUT M I MODULATOR ASSEMBL	HAT MINIMUM CONFOR LUKER OF FRAME MODUL SSUED COMERING CON	FAH 35-41000-801	ICR NO.4 PITCH CHAN ISTORER IN THE YORK	TO IMPROVE THE TRA IFTER JAM'S I 1982.	FAR E7-41000-831	AM INTESCRATOR BHO PAILURE MAB NOT IN		
TEST/AEFORT NUMBER FAILED COMPOMENT WANTE	A-140-04-4111-19	FAILURE MODE-OUT OF TOLERANCE DURING FACTORY TEST. CORDECTIVE ACTION-MOME: FAILURE NOT COMPINED, PORBIBLE HIMAN OR TEST ERROR.	A-90-04-3064 CIRCUIT BOAND-DIODF	FAILURE MODE-ERRATIC CPERATION, DURING MAPCHE DECK E37-706 AN ERRATIC CUTPUT WAS INDICATED IN THE BOOSTER YAW CHANN L. Failure was caused by Open Dione CR-6 (inhera! in the Yaw Modilator assembly asas Board. The Open Diode Resulted From a cracked glass envelope.	CORFECTIVE ACTION-MANUFACTIMING PROCESS CHANCED TO REQUIRE THAT HIMIMUM CONFORMAL COATING BE APPLIED MIERE COMPONEM IS ARE FERLACED. INFROMED TOCLING IMS FABRICATIVE AND MANUFACTURER OF FRANCE MODULES CHANCED TOCLS TO ELIMINATE VARIAN CE IN HTE PATTERM. REW MANUFACTURING PROCESS (PICFICATION ISSUED COVERING CONFORMAL COATING RESULFERENTS).	CT-98-U4-006F SER WOALM, FIEM TRANSIBTC.	HG OPERATION. UNIT REJECTED MARM VERNICR NO.1 FITCH CHAMMEL BECAME INSPERATIVE, CAUSING THE FAILURE ATTRIBUTED TO A DEFECTIVE TRANSCIER IN THE VERNIER MU.5 FITCH CHAMMEL, TWO SIMILAR 1-88-UA-DIAF, "DEGF.	GH AND MAMFACTURING PROCESS CHANGES, TO IMPROVE THE TRANSISTOR, WERE INITIATED LATE IN 1961 Hip-Knts were to be party fabricated After Jan. 1, 1962.	A-98-04-3060 CIRCUIT BOARD	FAILURE MODE-ERRATIC OPERATION-DURING AZP READINESS CHECKS ZAW INTESGRATOR SHOMED AM INTERMITTENT READOUT. PAILURE Was not verified by extemsive tests and 11 is canclided that pailure has not in canibler.	CORRECTIVE ACTION-LARKWAM, CRIBIN OF FAILURE NOT KNOWN.	
EYATEM SUB- BYATEM	TILTER AND SERVOAMP	FAILURE MODE-OUT OF TOLER COMBECTIVE ACTION-MOME. F	AUTCPILOT-SQUARE-A/3	FAILURE MODE-ERRATIC CMERATION EL. FAILURE MAS CAUSED BY OFEN FROM A CRACKED GLASS ENVELOPE.	CORPECTIVE ACTION-MANNEAC TS ARE FEPLACED. INPROVED CE IN HTTE PATTERN, EW MA	KUTOPILCT-SQUARE-A/B	FAILURE HODE-FAIL DURING OPERATION, UNIT INCINE TO NO 1-KRD OVER, FAILURE ATTRIBUTED AND REN REPORTED IN FAR CT-88-04-014F; "OEGF".	CORRECTIVE ACTION-DESIGN BY THE WEMDOR, FUTURE BHIP	IUTOFILOT-SQUARE-A/B	PAILUNE MODE-ERRATIC OPEN MAS NOT WEALFIED BY EXTERM	CORRECTIVE ACTION-UNKINA	

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THE AND CONTROLL OF TANABORNAMENTAL TRANSCORES WAS OND CITCULOUS THAN AND THE RELIABILITY OF THE RELIABILITY RECOMEDED THE VENCE INFORMER SETTINGS AND 2. AMALYSIS CONFINED THE RELIABILITY RECOMEDED THE VENCE INFORMER SETTINGS AND 2. AMALYSIS CONFINED THE RELIABILITY RECOMEDED THE VENCE INFORMER SETTINGS AND 2. AMALYSIS CONFINED THE PARTY CONFIDENCE INFORMER. THAN SETTINGS AND 2. AMALYSIS CONFIDENCE INFORMER SETTINGS AND 2. AMALYSIS CONFIDENCE INFORMER. THAN SETTINGS AND SETTINGS AN
2 4 8 19 24
FAR STEAM STEAMS. FAR ST ETR YES ET-41000-631 611201 NO AINER YAW CHANNEL WAS ERRATIC AND INTERMITTENT. TRANSISTOR GA MI AND HAD HIGHER THAN RATED COLLECTOR CUTOFF CURRENT. ONE CR AIN PARTS FABRICATED PRIOR TO 1962. FAR 1140 WTR NO ET-41000-629 611130 NO INE FAILED TO NULL DURING A/P SYSTEM TESTS, GS TRANSISTOR HAD INE FAILED TO NULL DURING A/P SYSTEM TESTS, GS TRANSISTOR HAD IN LEAD MELTED OPEN ON CIRCUIT BOARD AGA1. CAUSED BY EXTERMAL
FAR ET-41000-631 611201 NO AINER YAW CHANNEL WAS ERRATIC AND INTERMITTENT. TRANSISTOR GA NT AND HAD HIGHER THAN RATED COLLECTOR CUTOFF CURRENT. ONE CR AIN PARTS FABRICATED PRIOR TO 1962. FAR 1140 WTR NO ET-41000-629 611130 NO ET-41000-629 61110 NO ET-41000
AT AND HAD HIGHER THE AND HIGHER THE AIN PARTS FABRICATE FAR FAR FAR FAR FAR FAR FAR FA
INC LATE 1961 NEW CONTROLS TO IMPROVE THE UMIFORMITY, RELIABILITY, AND YI ITS WILL CONTAIN PARTS FABRICATED PRIOR TO 1962. FAR 114D WTR NO HSISTOR E7-41000-8E9 611130 NO HSISTOR E7-41000-8E9 611130 NO HSISTOR ENGINE FAILED TO NULL DURING A/P SYSTEM TESTS, 63 TRANSISTOR HAD THE HAD EMITTER LEAD WELTED OPEN ON CIRCUIT BOARD AGAI. CAUSED BY EXTERNAL
FAR 114D WTR NO HBIBTOR ET-41000-629 611350 NO HOUSTAINER ENGINE FAILED TO NULL DURING A/P SYSTEM TESTS, 93 TRANSISTOR HAD THE HAD ENITTER LEAD WELTED OPEN ON CIRCUIT BOARD A611, CAUSED BY EXTERNAL
NUBTAINER ENGINE FAILED TO NULL DURING A/P SYSTEM TESTS, GS TRANSISTOR HAD ON HAD ENITTER LEAD WELTED OPEN ON CIRCUIT BOARD AGAL, CAUSED BY EXTERNAL

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18 104 1884	DIFFICULTIES REVIEW-A	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	¥		
BV3TEH BUB-BYSTEM	TEST/REPORT NUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART HUMBER	VEHICLE SITE PRI	VENDOR NAME VENDOR PART NO	
CORRECTIVE ACTION-PIELD A/P BYSTEN POWER ON.	CORRECTIVE ACTION-FIELD PERSONNEL ADVISED TO EXERCISE CAUTION DURING COMPLEX SYSTEMS CHECKS OR TROUBLESHOOTING AZP SYSTEM POMER ON.	UTION DURING COMPLEX 8	YSTEMS CHECKS OR TROMBLE	виооттие итти	
AUTOFILOT-BEUARE-A/B	A-A9-04-3113F CIRCUIT BOARO-DICOE	FAR 27-41359-5	611109 FACTORY YES		447734
FAILURE MODE-BIRUCTURAL, CIRCUIT ORMAL COATIME, COATIME IMPARTED A	FAILURE HODE-BTRUCTURAL. CIRCUIT BOARD CONTAINED CRACKED DICOES. THESE MERE ATTRIBUTED TO EXCESSIVE AMOUNTS OF CONF Rmal coatims. Coatims imparted a strain on dicoes.	DICOES, THESE WERE AT	TRIBUTED TO EXCESSIVE AM	DUNTS OF CONF	
CORRECTIVE ACTION-PERSO	CORRECTIVE ACTION-PURSONNEL INFROVED WETHOD OF APPLYING	APPLYING CONFORMAL COATING.			
AUTOFILOT-SQUARE-A/B	A-90-04-3010E Amplifica	FAR 27-45200-1	3F 03TF2 YES I	YES INTERSTATE	000055
FAILURE MODE-FAIL DURIN STORS 83 AMD &4 EMITTER	FAILURE HODE-FAIL DURING OPERATION-NO BOOSTEN ENGINES CONTROL SIGNALS FROM SERVOAMPLIFIER, CAUSE OF FAILURE, TRANSI Tors as and 44 enitter leads ofen.	DATROL SIGNALS FROM SER	VOAMPLIFIER, CAUSE OF FA	ILURE, TRANS!	
CORRECTIVE ACTION-DETERMINED THAT	SHORTING AMPLIFIER	PUT TO GROUND CAUSED L 18E8 DURING CHECKOUT CR	OUTPUT TO GROUND CAUSED LOSS OF TRANSISTORS, PERSONNEL W PROBES DURING CHECKOUT OR TROUBLESHOOTING WITH POWER ON.	OWEL WERE CA	
AUTOFILOT - SAUARE - A/B FILTER AND SERVOAMP	A-85-04-3020-F CIRCUI BUNND-TRANSIBION	FAR #7-45200-1	SF MTR YES		99766
FAIL CURING OFFRATION.	FAIL CURING OFERATION. DURING PERFORMANCE OF MAPCHE DECK 451, THE VERHIER ENGINE NO.1 NOULD NOT MULL. 43 HAD SHORTE DEHITTER TO COLLECTOR. 44 EMITTER LEAD WELTED OPEN OM CRT BOARD AGAI DUE TOTHE SHORT.	(451, THE VERNIER ENGI 7 BOARD AGAL DUE. TOTHE	AE NO.1 NOULD NOT WULL.	45 HAD SHORTE	
COARECTIVE ACTICM-FIELD A/P BYSTEM FOMER CN.	COARECTIVE ACTION-FIELD PERSONNEL ADVISED TO EXERCISE CAUTION DURING CONFLEX SYSTEMS CHECKS OR TROUBLESHOOTING WITH AAF SYSTEM FOMER ON.	IUTION DURING COMPLEK B	YSTEMS CHECKS OR TROUBLE	внооттие ветн	
AUTOFILOT- SQUARE-A/B FILTE!! AND SERVOAMP	HG-AB-D4-ZIS-F CIRCUIT BCARD-CAPACITOR	FAR 27-45200-15	109U FACTORY YES		983776
FAILURE MODE-OUT OF TOLERANCE, THE UNIT R CI WAS INSTALLED IN REVERSE POLARITY,	TOLERANCE, THE UNIT HAS SENSITIVE TO HEAT AND HAS UNSTABLE. VISUAL CHECK REVEALED THAT CAPACITO I REVERSE POLARITY,) HEAT AND WAS UNSTABLE	. VIBUAL CHECK REVEALED	THAT CAPACETO	
CORRECTIVE ACTION-UNKNOWN.	, Park				
		en en en en en en en en en en en en en e		PAGE 0349	

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBERNE

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99966 156981 PAGE 0550 URE 27-90725-1. THE PITCH INTEGRATOR CHANNEL WAS INCPERATIVE, A LEARY DIODE CRE(SVIS) WAS FOUND IN THE PITCH FILTER CIRCUIT BOARD, A441. THIS WAS NOT THE PRIMARY CAUSE OF THE FAILURE, CIRCUIT BOARD A441 P/N 27-41363-805 S/N 78 WAS F CORRECTIVE ACTION-CORRECTIVE ACTION ON PROBLEM AREAS WAS TAKEN BY INSPECTION SUPERVISION HOLDING MERLY MEETINGS WI FAILURE MODE-FAILED DURING OPERATION. THE A/D SERVOANP-FILTER CANINTER FAILED DURING PERFORMANCE OF CHECKOUT PROCED YES RAYTHEON COMPA NO NY CORRECTIVE ACTION-THE RAYTHEON COMPANY SENICONDUCTOR DIVISION HAS INITIATED DESIGN AND MANUFACTURING PROCESS CONTRO L CALNECS TO INFROME THE UNIFORMITY, RELIABILITY, AND YIELD ON THEIR TRANSISTOR TYPES 2NG28A AND 2NG29A. FAILURE MODE-OUT OF TOLERANCE-INSUFFICIENT ATTENTION AND PHASE LAG IN PITCH: YAW AND ROLL FILTERS DURING MISSILE CH CUITBOARD WAS DEFECTED AND CAUSED THE FAILURE. THE TRANSISTOR FAILED BECAUSE THE EMITTER LEAD WAS DISPLACED AT THE C -BKIA. THE VERNIER 2 TAW AMPLIFIER BECAME INCPERATIVE. AMALYSIS REVEALED THAT TRANSISTOR Q1 (2NG28A) IN THE AGAI CIR FAILURE MODE-FAIL BURING OPERATION-NO BOOSTER ENGINES CONTROL SIGNALS FROM SERVOAMPLIFIER, CAUSE OF FAILURE, TRANSI STORS &S AND SSREWISSY EMITTER/ COLLECTOR SHORT, DIODE CRS (IMASSA) OPEN, DETERMINED THAT SHORTING AMPLIFIER OUTPUT T CORRECTIVE ACTION-FACTORY AND SITE PERSONNEL WERE CAUTIONED TO EXERCISE CARE IN THE USE OF TEST EQUIPMENT PROBES DU RIMS CHECKOUT OR TROUBLE- SHOOTING WITH POMER ON. FAILURE MODE-FAIL DURING OPERATION. THE A/P SERVOAMPLIFIER CAHISTER FAILED DURING PERFORMANCE OF PROCEDURE 27-90336 OTH VENDOR PART NO VENDOR NAME YES 60/C YES 50/C Q # PRI DATE DIF TIME DIF 911E WITHER AMALIZED ON FAR A-98-04-269 AFTER CAPACITOR C4 ON ON A REPLECEMENT A4A1 BOARD FAILED. ECKOUT. FAILURE NOT CONFIRMED AT 8.D. PROBABLE CAUSE MAS CHECKOUT UNIT OR PROCEDURAL ERROR. === 2 25E 610927 VEHICLE 611004 611006 611016 DIF DATA SOURCE PART NUMBER FAR 27-41000-837 £7-41000-635 Far Amplifier-Servo, Yaw-Vernier/Trans 27-41000-831 27-45200-11 FAILED COMPONENT NAME TEST/REPORT NUMBER A-98-04-288F CIRCUIT BOARD CAPACITOR O GROUND CAUSED LOSS OF TRANSISTORS AND DIODE. AMPLIFIER/TRANSISTOR RA-98-04-3061-F FILTER-ELECTRICAL RYSTAL JUNCTION AND BARELY MADE CONTACT. HE-AS-04-3006F CORRECTIVE ACTION-NEW SERVOAMPLIFIER. ISTOR ENGERA AUTOPILOT-SQUARE-A/B AUTOPILOT-SQUARE-A/B AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP FILTER ANC SERVOANF AUTOPILOT - SAUARE - A /B FILTER AND SERVORM FILTER AND SCRYDAMP SES-SYSTEM STREE

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	094315	094314			893606			<u></u>		498864			т
VENDOR HAME VENDOR PART NO	AVO 8 TO INSPECTORS THAT ARE FOUND TO		OF CHECKOUT PROCEDUR CIRCUIT BOARD ASSEMB PRIMARY CAUSE OF THE	(1) HCLDING WEEKLY MEETINGS W O B TO INSPECTORS THAT ARE FOU ED-5 REV. 10 TO VIBRATE INDIV		ING INTEGRATOR		ED. COUNTDOWN		TRANSI TROM	INCORRECT OUT	AS RESULT OF VENDOR CORRECTIVE A	
PRI	DR B THAT	YES		ING WEEL	YES NO	RLY DUR		S RESUM		7.ES	LS GAVE	A VER	
817E 71HE DIF	INSPECTO	=	SEMANCE THORK	1) HCLD) 8 TO INS 3-5 REV	11 -4200.	6 PROPE		# 200 ×		8. ¥	CHANNE OF IN R	ESULT O	
VEHICLE DATE DIF		25E 610927	URING PERFO D SUMMING I CUIT LEAD I	RVISION. (Suline AVO	25E 610927	FUNCTIONIN ATTEMPT CO		THE COUNT		53E 610919	NO. 1 ROLL	ENDOR AS P	
DIF DATA SOURCE FART NUMBER	I IS TAKEN BY ISSUING FAR A-58-G4-289).	FAR 27-41365-803	ER CANISTER FAILED DURING PERFORMANCE. THE ITEM SWITCH AND SUMMING NETWORK IX IN THE PRINTED CIRCUIT LEAD WAS THE	IN BY INSPECTION SUPE ICTION IS TAKEN BY IS I GROUP HAS INITIATED ALFUNCTIONS.	COUNTDOWN	ATOR CIRCUIT WAS NOT WAS DURING A LAUNCH	FERRATIC OPERATION) .	CAGE WAS REPLACED AND STEM IN THE SCIENTIFI		FAR 27-45200-1	1 AND VERNIER ENGINE NO. 1 ROLL CHANNELS GAVE INCORRECT OUT AND 77. CAUSE, FAULTY ZENER DIODE IN ROLL AMPLIFIER-FILTER.	IMPROVED QUALITY CONTROL BY VEH DIODE INEGS4 IN USE FROM VENDOR.	
TEST/REPORT NUMBER FAILED COMPONENT NAME	TH INSPECTORS IN THE FACTORY. INDIVIDUAL CORRECTIVE ACTION IS TAKEN BY ISSUING BE MAKING REPETITIVE MISTAKES (THIS CORRECTIVE ACTION FOR FAR A-98-04-289).	A-98-04-289F CIRCUIT BOARD-A4A1	FAILURE WODE-FAIL DURING OPERATION. THE A/P SERVOAHP-FILTER CANISTER FAILED DURING PERFORMANCE E 27-90725-1. THE PITCH INTEGRATOR CHANNEL WAS INOPERATIVE. THE ITEM SWITCH AND SUMMING NETWORK LY MAS ANALYZED AND IT WAS DETERMINED THAT A HAIRLINE C:2:CK IN THE PRINTED CIRCUIT LEAD WAS THE PITCH FILTER CIRCUIT BOARD FAILURE. (SEE FAR A-98-04-288.)	CORRECTIVE ACTION-CORRECTIVE ACTION ON PROBLEM AREAS TAKEN BY INSPECTION SUPERVISION. (1) HOLDING WEEKLY MEETINGS W ITH INSPECTORS IN THE FACTORY, (2) INDIVIDUAL CORRECTIVE ACTION IS TAKEN BY ISSUING AVO S TO INSPECTORS THAT ARE FOUND TO BE MAKING REPETITIVE MISTAKES. THE QUALITY ASSURANCE GROUP HAS INITIATED QCS-27D-20-5 REV. 10 TO VIBRATE INDIVIDUAL WOOULE BOARDS AFTER REPAIR OR ON BOARD INTEMITTENT MALFUNCTIONS.	AA61-0146/P1-501-00-E5 SERVO AMPLIFIER	FAILURE MODE-ERRATIC OPERATION. THE BOOSTER PITCH INTEGRATOR CIRCUIT WAS NOT FUNCTIONING PROPERLY DURING INTEGRATOR SERVO GIMBALING TEST (NO FURTHER DETAILS RECORDED). THIS WAS DURING A LAUNCH ATTEMPT COUNTDOWN.	SYSTEM EFFECT-ERRATIC OPERATION. (NO DETAILS ON NATURE OF ERRATIC OPERATION)	VENICLE EFFECT-COUNTDOMN DELAYED. THE SERVOANFLIFIER PACKAGE WAS REPLACED AND THE COUNTDOMN WAS RESUMED. COUNTDOMN WAS LATER ABGRTED DUE TO PROBLEM WITH CENTAUR GUIDANCE SYSTEM IN THE SCIENTIFIC PASSENCER FOD.	ICE A-AMPLIFIER.	A-9F-04-3012F Abel IFIER/DIODE	FAILURE MODE-FAIL DURATION OPERATION-BOOSTER ENGINE NO. 3 Puts which caused a no-go indication on mapche, cards 74 A	CORRECTIVE ACTION-FAULTY FAGRICATION BY VENDOR. IMPROVED QUALITY CONTROL BY VENDOR TION REQUEST(VCAR) 1641-42. BETTER CONSTRUCTED DIODE INEDSA IN USE FROM VENDOR.	
8731EX 3.65-2737EX	TH INSPECTORS IN THE FACTORY. BE MAKING REPETITIVE MISTAKES	AUTOPILOT-SQUARE-A/B FILTER AND SERYOAMP	FAILURE WODE-FAIL DURIN E 27-90725-1. THE PITCH LY NAS ANALYZED AND IT W PITCH FILTER CIRCUIT BO	CORRECTIVE ACTION-CORRECTIVE AN ITH INSPECTORS IN THE FACTORY, NO TO BE MAKING REPETITIVE HIST IDUAL MODULE BOARDS AFTER REPAIL	AUTOFILOT-SQUARE-A/B FILTER AND, SERVOAMP	FAILURE MODE-ERRATIC OF SCR O GIMBALING TEST (N	SYSTEM EFFECT-ERRATIC O	VENICLE EFFECT-COUNTDON	CORRECTIVE ACTION-REPLACE A-AM	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	FAILURE MODE-FAIL DURAT PUTS WHICH CAUSED A NO-6	CORRECTIVE ACTION-FAULTY FABRICATION BY VENDOR.	

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	10 THE 1000	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	PILOT SYSTEM-AIRBOR	¥				<i>-</i> -
	BYBIEN	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	SITE TIME DIF	0 TE	VENDOR NAME VENDOR PART HO	
AUTO	AUTOFILOT-SAUARE-A/B	AC-61-DOS6/82-502-AS-01 VERNIER CHE PITCH BERVOAMPLIFIER	CAPTIVE	5E 610915	82 -2040	2 S		6 7 5 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6
2	FAILURE MODE-OFEN ELECTR	FAILURE MODE-OPEN ELECTRICAL, OPEN CIRCUIT TO THE VERNIER ONE PITCH BERVO-AMPLIFIER, WHILE GROUND HYDRAULICS MERE	ME PITCH BERVO-AMP	LIFIER, WH	ILE GROUN	H Q	RAULICS WERE B	·····
5	SYSTEM EFFECT-OFERATION DOES NOT	DOES NOT START. WABLE TO MAL THE VI ENGINE CAUSING IT TO MOVE MARD OVER IN POSITIVE	VI ENGINE CAUSING	17 TO HOVE	HARD OVE	z K	POSITIVE PITCH	
٠ ۴	WHICLE EFFECT-THE PROBLEM COULD	EN COULD NOT BE ISOLATED SO THE RUN WAS ABORTED.	WAS ABORTED.					
ٽ ٽ ———	CORRECTIVE ACTION-THE AN	CORRECTIVE ACTION-THE ANOMALY REAPPEARED DURING RUN 303 COUNTDOMN. THIS TIME THE PROBLEM WAS ISOLATED AND CORRECTED DURING COUNT.	ANTDOMN. THIS TIME	THE PROBLE	H 148 18	2.ATE	D AND CORRECTED	
12.17	AUTOPILOT - SAUARE - A/B FILTER AND SERYCAMP	AE61-0918/FC-4CO-02-137 AMPLIFIER	COMPOSI TE-FACTORY	1370	FACTORY P6	2 2	5/Q 3	888034
<u> </u>	FAILURE MODE-FAIL DURING OPERATION. A FAULTY AGE YAW INTEGRATOR MULLING	,	MULLED FROM 96 BEC	CONDS UNTIL	. STAGING	Ξ	S WAS CAUSED BY	
	SYSTEM EFFECT-IMPROPER AMALOG SIGNALS.	AMIOG SIGNALS.	,					
	EHICLE EFFECT-COMPOSIT	WENICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTINE, RESUIRED.	Eautreb.					
	CORRECTIVE ACTION-REPLACED YAM	CED YAW INTEGRATOR MALLING AMPLIFIER IN THE AGE.	R IN THE AGE.					
5 =	AUTOPILOT-SQUARE-A/B FILTER AND SERVOAMP	AE61-0698/FC-6CO-02-017 SERVO AMPLIFIER	COPPOSITE-FACTORY	4 17F 610829		<u> </u>		20066 0
- 8	FAILURE MODE-OUT OF TOLERANCE. OUT AMPLIFIER IN AGE.	ERANCE. THE PITCH AXIS SERVO GAINS MERE GREATER THAN EXPECTED. TROUBLE TRACED TO FAULTY BUCK	NERE GREATER THAN	EXPECTED.	TROUBLE	TRACE	D TO FAULTY BUC	<u> </u>
	SYSTEM EFFECT-EMPROPER ANALOG	ANALOG BIGNALS.						
	VEHICLE EFFECT-COMPOSI	VEHICLE EFFECT-COMPOSITE DELAYED. POST-COMPOSITE TESTING REQUIRED TO LOCATE SOURCE OF DIFFICULTY	REQUIRED TO LOCATE	SOURCE OF	DIFFICUL	<u>, T</u>		
	CORRECTIVE ACTION-DEFE	CORRECTIVE ACTION-DEFECTIVE ANTLIFIER REPLACED IN AGE.						1
135	AUTOFILOT-SQUARE-A/B FILTER AND SERVOANP	A-SH-G4-E9Z-F CIRCUIT BOARD AIAI/AIAE	FAR 27-45200-1	54E 610828	FOAB	¥ 8	76.5 70	
< F K	FAILURE MODE-FAILED DURING OPERATION-DURING AILED TO HOLD A MULL POSITION WHEN HYDRAULIC TIVE, ON CIRCUIT BOARD AIAI, TRANSFORMER TZ: RB, CR4, CRIG, CRIS, AND TRANSISTOR 85 WERE D	RING OPERATION-DURING PERFORMANCE OF PROCEDURE E7-98237-6, THE BOOSTER ENGINES GITTON WHEN HYDRAULIC PRESSURE WAS APPLIED. ANALYSIS FOUND THE ROLL FILTER MODU ASIAI, TRANSFORMER TZ, DIODES CR3, CR7, CR12 AND CR16 AND,ON CIRCUIT BOARD ASAE, DIRANSFORMER ES BETERNAL SOURCE(S) AT FOAFS.	PERFORMANCE OF PROCEDURE 27-98237-6, THE BOOSTER ENGINES VIBRATED AND F PRESSURE WAS APPLIED, ANALYSIS FOUND THE ROLL FILTER WOOULE TO BE DEFEC DIODES CR3, CR7, CR12 AND CR16 AND.ON CIRCUIT BOARD AIAR, DIODES CR2, C DEFECTIVE, PROBABLY CAUSED BY EXTERNAL SOURCE(S) AT FOAFS.	ST-6, THE FOUND THE AND, ON CIR	BOOSTER I ROLL FIL CUIT BOA RCE(8) A	ENGIN TER M RD A1 T FOA	ES VIBRATED AND F COULE TO BE DEFEC AR, DICOES CRE, C FB,	r g v
							PAGE 0552	28
								1

SEMERAL . JANICA CONVAIR DIVISION

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1787EX	TEATTRECENT NUMBER DIF DATA SOURCE V	DIF DATA SOURCE	VEHICLE BITE	817C	= E	VENDOR HAME	
							:
CORRECTIVE ACTION-NO CREES AFB HAS BEEN SOLD EF FAF A-SH-D4-3096 FOR	CORRECTIVE ACTION-NO CORRECTIVE ACTION WILL BE TAKEN AS 11 MAS CONCLUDED THAT THE FAILURE HAS EXTERALLY INDUCED. FO Rees afb has been sold off to the air force, hence no further information can be obtained to resolve this problem. R Ef far a-bh-04-3096 for similar problem.	THE CHICLUSED THAT	THE FAILURI E OBTATHED	E MAS EXT TO RESIGN	ERALLY 1	MOUCED. FO	
AUTOFILOT-SQUARE-A/B	A-BII-04-E7SF SERICA WPL IFIER	FAR 27-41000-611	010083	ETR	YES HO		7 15.51
PAÍLUPE MODE-OUT OF 34 IGH FAILIRE AMALYSIS. OR TEST SET ERROR AT 1	SPECIFICATION. THE BUBLECT BERVOAMPLIFIER FAILED BECAUSE THE PITCH PREQUENCY RESPONSE MAS TOO H 1' ID NOT CAFTIRM THE REPORTED FAILURE THE REPORTED MALFUNCTION WAS PROBABLY DUE TO HUMAH ERROR 7 ETR.	IER FAILED BECAUSE VHE PITCH PREQUENCY RESPONSE MAS TOO H THE REPORTED MALFUNCTION WAS PROBABLY DUE TO HUMAH ERROR	HE PRICH PL	REGUENCY	RESPONSE DUE TO P	MAKH ERROR	
9	CORRECTIVE ACTION. ETR HAS BEEN NOTIF ED AND IS TAKING THE NECESSARY CORRECTIVE ACTION. A-8F-04-E90F BSE NAFB VES	FAN	E NECESSAR	Y CORRECT	TES ACT		=
FAILURE MCDG-FAILED OURING OPERATION ATOR GAIN WAS LCM. THE ITCH CANISTER ERIFIED IN FAILURE AMLYSIS. THE FAIL VABLY RESULT IN AN LHKOMEOUS READOUT.	FAILURE MOC-FAILED DURING OPERATION, DURING PERFORMMEE OF MAPCHE RUN OF DECK EST, THE BOOSTER E YAW FILTER-INTEGR AATOR GAIN MAS LCM. THE ITEM CANISTER IS AN ENGINEERING TEST SET USED FOR MAB TESTING. THE REPORTED FAILURE WAS NOT V EATFIED IN FAILURE AMLYSIS. THE FAILURE MAS NOT IN THE CANISTER. ELECTRICAL NOISE IN THE MAPCHE SYSTEM COULD CONCEI	F MAPCHE RUN OF DECH F SET USED FOR MAB TE HISTOR. ELECTRICAL MC	1 237, THE 1	ACCOSTER 1	YAW FILLORE	TER-INTEGR	
		FAR	202	13	YES HUG	HUGHES AIRCRAF	663773
AUTOFILOT-SHUARE-A/B FILTER AND SERVOANP FAILURE HODE-FAILED DA	ILTER AND SERVOANP AMPLIFIER-YAH PAILURE HAD SERVOANP AMPLIFIER-YAH PAILURE HAD SERVOANP AMPLIFIER-YAH PAILURE HAD SERVOANP PERFORMANCE OF PROCEDURE ET-S PAILURE HAD SERVOANP PERFORMANCE OF PROCEDURE ET-S PAILURE HAD SERVOANP PAIL FRANKLEICH GASTER AND GASTEMAND ON MERE DEFECTIVE, AS MAS SHORTED AND T	EP-41000-831 E7-41000-831 O YAW HULLING OUTPUT 141 AND 83 (PM488) ON	GLOSES CONTINC PER	PORMANCI TIVE	9 5	610823 NO T BURING PERFORMANCE OF PROCEDURE ET-9 MERE DEFECTIVE, 42 MAS SHORTED AND T	
35-5K-ZD, FAILURE AN. : ERITTER JONCTION LEJ	2950-BK-ZD, FAILNE AMLTBIB POMES THE HANGESTONS WE MAN LED OFEN.						
CORRECTIVE ACTION-THE BPCCIFIES A THOROUGH ME CHATED THE HANNFACTURE	BENICONDUCTOR DIVISION OO HUGHES AIRCENT HAS ISSUED SPEC. NO. 5-H DATED 11 SEPT 1861, WHICH SCHANICAL AND ELECTRICAL PREPOUCTION AND POST PRODUCTION INSPECTION TESTS. THE VENDOR HAS AUT OF THIS TYPE OF TRANSISTOR TO ELIMINATE AN'T HUMAN ERROR IN MORKMANSHIP.	CERPT HAS ISSUED SPE I AND POST PRODUCTION LATE ANY HUMAN ERROR	IN MORRHAN	DATED 1: + TESTS. HIP.	11E VEN	SOR HAS AUT	
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SENERAL DYNAMICS CONVAIR DIVISION

11 JUN 11

CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

STSTEN RUB-STSTEN	TEST/REPORT NIMBER FAILED COMPONENT NAME	DIF DATA SOUNCE PART NUMBER	VEHICLE BITE DATE DATE DATE DATE DIP		PRI VENDUR HAME OTH VENDOR PART HO	
AUTOFILOT-BRUANE-AZE FILIER AND BERYCAMP	AA61-0187/FR-408-00-111	COUNTDOMN	1110 ETH 6106ES -800	00	Q Q	• • • • • • • • • • • • • • • • • • • •
PATCURE MODE-ELECTRICAL ROUND CIRCUIT FOR PITCH 1	ICAL OPERI. SERVO PACKAGE PITCH CHAMMEL WOULD NOT RESPOND TO GROUND COMMAND DUE TO OPEN MIRE IN TCH SERVO INPUT TEST.	WOULD NOT RESPOND TO	GROUND COMM	AND DUE	TO OPEN WIRE IN G	
STSTEN EFFECT-OFERATION COMMANDS.	SYSTEM EFFECT-OFERATION DOES NOT STARY, SYSTEM WOULD NOT RESPOND TO GROUND COMMANDS.	ESPOND TO GROUND GEN	ERATED PITCH	CHAMME	GENERATED PITCH CHAMMEL ENGINE GIMBALING	
VEHICLE EFFECT-COUNTDOM	WEHICLE EFFECT-COUNTDOWN DELAYED. PROBLEM ENCOUNTERED DURING HOLD. PICKUP FROM HOLD DELAYED.	NG HOLD. PICKUP PRO-	HOLD DELAYE	ġ		
AUTOFILOT-SQUARE-A/B A- FILTER AND SERVOAMP A)	A-9H-04-281-F A-9H-07-281-F	FAR 87-45800-1	ESE FO	FORBES	YES	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
FAILURE MODE-CPEN (ELEC) NSFORMER, PINS A-B OF PLU BLEM EXISTED AT THE COMPL CAUSED TRANSFORMER T1, 1	FAILURE MODE-CPEN (ELECT). DURING A REVALIDATION OF PROCEDURE 27-47233, IT WAS DISCOVERED THAI THE FOMER SUPPLY TRA NAFORMER, PINS A-B OF PLUG UZ-13, WAS OPER CIRCUITED. ANALYSIS CONTRMED THE FAILURE AND CONCLUDED THAY A WIRING PRO BLEM EXISTED AT THE COMPLEX WHICH SHORTED THE VERNIER MUNBER I PITCH AMPLIFIER OUTPUT EXTERNAL TO THE CANISTER. THIS CAUSED TRANSFORMER TI, TR. HSISTER B4 (EMADD) AND DIGGE CR4(IN 486A) TO FAIL.	URE 27-47233, IT MAS DISCOVERED THAI THE FOWER SIS CONFIRMED THE FAILURE AND CONCLUDED THAT A R I PITCH AMPLIFIER OUTPUT EXTERNAL TO THE CANI (IN 486A) TO FAIL.	DISCOVERED ILURE AND CO OUTPUT EXTER	THAT THE MCLUDED HAL TO	ET-47233, IT MAS DISCOVERED THAT THE FOWER SUPPLY TRA COMPIRMED THE FAILURE AND CONCLUDED THAT A WIRING PRO PITCH AMPLIFIER OUTPUT EXTERNAL TO THE CAMISTER. THIS 486A) TO FAIL.	
CORRECTIVE ACTION-FIELD PERSONN ION, FIELD PERSONNEL HAVE BEEN A OOTING WITH THE SYSTEM POWER ON.	CORRECTIVE ACTION-FIELD PERSONNEL HAVE BEEN ADVISED TO CHECK THE INTERCONNECTING CABLE MARNESS FOR SHORTS. IN ADDIT ION, FIELD PERSONNEL HAVE BEEN ADVISED TO ENERCISE CAUTION DURING PERFORMANCE OF COMPLEX SYSTEMS CHECKS OR TROUBLESH DOTING WITH THE SYSTEM FOMER ON.	CK THE INTERCOMMECTE	MG CABLE HAR F COMPLEX SY	NESS FO	: SHORTS. IN ADDIT RECKS OR TROUBLESH	
AUTOFILOT-BRUNE-A/B FILTER AND SCRVCAMP	A-9H-U4-3021-F TRANSFORMER	FAR 27-04355-3	CIOSIS FA	FAFB	YES BENDIK NO	89 Y 8 & O
FAILURE MODE-PAIL DURING MEAT, THE PKIMARY WAS PA MED, PRODABLE EXTERNAL BY	FAILURE HODE-PAIL DURING OPERATION. DURING VOLTAGE CHECKOUTS, THE TRANSPORMER WAS NOTED TO DE DISSIPATING EXCESSIVE Heat. The primary was parily open—circuited and the secondary was partially shorted to the primary. Cause undetermi ed, prodable external bacrt of becondary winding.	TS, THE TRANSFORMER WAS MOTED TO BE DISSIPATING ARY WAS PARTIALLY SHORTED TO THE PRIMARY. CAUSE	WAS NOTED TO CRIED TO THE	PRINAR	IPATING EXCESSIVE . CAUSE UNDETERNI	
CORRECTIVE ACTION-NOME T	CORRECTIVE ACTION-NOME TAKEN AS EXACT CAUSE WAS NOT DETERMINED AND NO FURTHER INFORMATION WAS AVAILABLE AS FORBES IS HAS DEEN SOLD TO THE AIR FORCE.	INED AND NO FURTHER	INFORMATION	TAS AVA	LABLE AS FORBES A	
AUTOFILOT-BOURE-A/B	A-SH-D4-28D AMPLIFIZK-8GRVO, PITCH/TRANSFORMER 27-4320G-1	FAH R 87-45200-1	20E FO	FORBES	22	
FAILURE MODE-FAIL TO OPE OF THE CAMISTER REVEALED AMEXTERNAL BHCAT IN THE IODE CRA (184688A).	FAILURE MODE-FAIL TO OPERATE. DUBING THE PERFORMANCE OF PROCEDURE ET-BEESS THE ENGINES FAILED TO GIMBAL. A CHECKOUT OF THE CAMISTER REVEALED NO OUTPUT FROM ANY OF THE AMPLIFIERS. AMALYSIS CONCLUDED THAT TRANSFORMER IL PAILED DUE TO AMEXTERAL BHORT IN THE VERNIER PITCH OUTPUT. THIS EXTERNAL SHORT ALSO DAMAGED TRANSISTORS SS.SA (SOTH EMSS) AND D ODE CRA (SMAGGA).	CEDUME 27-98233 THE ERS. AMALYSIS CONCLU L SHORT ALSO DAMASEZ	ENGINES FAI DED THAT TRA TRANSISTORS	NSFORME 83.84	HMBAL. A CHECKOUT I TE FAILED DUE TO BOTH BH488) AND D	

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SH C CONVAIR DIVISION GENERAL

DIFFICIATIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

100 TOT 11

136760 698868 094160 VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO H A/P SYSTEM FOMER ON, MEASURING VOLTAGES WITH THE VOLT-CHMMETER FUNCTION IN THE AMPERE OR LOW CHM SCALES CAN MAVE A DAMAGING EFFECT ON CANISTER OUTPUT, IT ALSO OVERLOADS THE POMER SUPPLY, THE USE OF OSCILLOSCOPE, VIVM, OR ANY METER WITH COMMONCHASSIS GROUND CAN ALSO CAUSE DAMAGE IF PROBED MITH THE WRONG TEST LEAD FAILURE MODE-PAILED DURING OPERATION-DURING PERFORMANCE OF MARCHE DECK 401, CARD 434, THE BOOGTER 2 PITCH CHANNEL F AILED TO MULL, FAILURE ANALYSIS REVEALED THAT TRANSFORMER TI P/M27-04163-3 ON CIRCUIT BOARD 45A2 OF BOOSTER 2 AMPLIF IER WAS DEFECTIVE, TRANSFORMER TI FAILURE WAS DUE TO INSULATION BREAKDOM AT HIGH TEMPERATURE, 176 DEGREES F. AT LOW PAGE 0955 CORRECTIVE ACTION-NO CORRECTIVE ACTION DUE TO (1) LOW REJECTION RATE IN RECEIVING INSPECTION, (2) NO ELECTRICAL PAIL URE HISTORY IN THE FACTORY, AND (3) THIS FAILURE BEING THE FIRST RECORDED FOR THIS TRANSFORMEN. & C HAS BEEN INFORME FAILUNE MODE-ERRATIC OPERATION, THREE ERRONGOUS SECO SIGNALS OCCURRED DURING A MOLD ALONG WITH RESULTANT SWITCH OPE RATIONS. THIS MAY HAVE BEEN CAUSED BY A BAD PITCH DEMOULATOR TRANSFORMER GENERALITG MOISE ON 400 CYCLE POMER AND SC CORRECTIVE ACTION-FIELD PERSONNEL HAVE BEEN CAUTIONED TO EXERCISE CAPE DURING SYSTEMS CHECKS OR TROUBLESHOOTING MIT FAILURE HORE-FAIL TO OPERATE. PAILURE OF A TRANSFORMER OF THE PITCH CHANNEL DEMODULATOR IN THE SERVO CANIBIER CAUSE SYSTEM EFFECT-IMPROPER ANALOS SISMALS, LOSS OF THE PITCH CANKEL DEMODULATOR CAUSED LOSS OF CONUANDS TO THE ENVINES D AND SURVEILLANCE ON THIS PART BY GO/C WILL BE MADE TO INSURE THAT NO DEFECTIVE TRANSFORMERS ARE USED. ž 3 <u>د</u> و -1700 610610 010010 WENICLE EFFECT-COMPOSITE DELAYED, HOLD, BURING WHICH PROBLEM OCCUMRED, WAS EXTENDED. 20.0 COMPOSITE-FRO/DPL COMPOSI TE-FRD/DPL DIF DATA BOUNCE PART NUMBER AMPLIFIER-SENYO, BOOGTER E/TRANSFO E7-45200-1 STRIEM EFFECT-IMPROPER DISCRETE SIGNALS. ERROMEOUS SECO SIGNALS. DENODULATOR-PLTCH TRANSFORNER AA61-0111/P6-4CHO-03-104/C-2 FAILET COMPONENT NAME TEST/REPORT NUMBER RMCRP/NE7-04165-3 CORRECTIVE ACTION-REPLACED BERNO CANISTER. A-90-04-294F D THE ENGINES NOT TO RESPOND IN PITCH. TEMPERATURES, NO DEFECT MAS EVIDENT. TRANSFORMER CORRECTIVE ACTION-UNKNOWN. RAMBLING THE PROGRAMER. WENICLE EFFECT-NOME. AVITOPILOT - SQUARE-A/B AUTOFILOT - SQUARE - A/B AUTOFILOT - BRUARE - A/B FILTER AND SERVOANS FILTER AND SERVOAMP FILTER AND BERVOARF 108-3787EM IN THAT CHANNEL. 8787EH

GENERAL DYMMICS

18 JUN 1964	DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	WILOT SYSTEM-AIRBOR	¥				
SYSTEM BUS-EVSTER	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF DATA BOUNCE PART NUMBER	VEHICLE DATE DIF	317E 710 3417	# 0 # 2	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOPILOT-BRUNKE-A/B FILTER AND SERVOAMP	A-07-04-2647	FAR #7-45E00-1	010010	MARREN	♀		
FAILURE WOE-OUT OF TOLES GAIN. FAILURE ANALYSIS DIE OISE ENAMATING FRON THE SL	FAILUME MODE-OUT OF TOLERANCE. THE SUBJECT BERVOAMPLIFIER RECEIVED A MAPCHE NO-GO INDICATING MIGH PITCH INTEGRATOR GAIM, FAILUME ANALYSIS DID NOT COMFIRM ANY FAILUME IN THE CANISTER. THE MAPCHE NO-GO WAS PROBABLY DUE TO EXCESSIVE N OISE ENAMATING FROM THE SURROUNDING FACILITY, IMPROPER GROUND INSTALLATION OR IMPROPER DECK PROGRAMMING.	RECEIVED A MAPCHE NO INISTER. THE MAPCHE 40 INSTALLATION OR I	TEO INDICA NO-EO MAS MPROPER DE	TING HIGH PROBABLY CK PROGRA	P DUE	CH INTEGRATOR	
CORRECTIVE ACTION-WOME.	ада адабия адабия дайна обирана обица от отказа от отказа от от от от от от от от от от от от от	адання дання вы выполня на выполня на выполня на выполня на выполня на выполня на выполня на выполня на выполн					······································
AUTOFILOT-SQUARE-A/B	A-87-D4-R76-F CIRCUIT BOARD ASAE/RESISTOR	FAR RT-45200-1	53E 610609	MALKER	9 9		494520
FAILURE MODE-FAILED DURIN TIMG INCORRECT GAINS ON DO BOARD AGAE MAS DEFECTIVE.	FAILURE MODE-FAILED DURING OPERATION-DURING PERFORMANCE OF MAPCHE PROCEDURE 27-90237-6, NO-608 MERE RECEIVED INDICA ING INCORRECT GAINS ON DOOSTER AND BUSTAINER TAN CHANGELS. AMLYSIS REVEALED THAT PRECISION RESISTOR RII ON CIRCUIT BOARD AGAE MAS DEFECTIVE. IT WAS CONCLUDED THAT IMPROPER FORMING OF THE WIRE LEAD AT THE FACTORY CAUSED THE DEFECT.	MAPCHE PROCEDURE ET AMALYSIS REVEALED T MHING OF THE WIRE L	-96237-6, HAT PRECIS	NO-GOS ME HON REST	ERE RE STOR 1 CAUSE	CCEIVED INDICA ALL ON CIRCUIT ED THE DEFECT.	
CORRECTIVE ACTION-FOLM FO	CCRRECTIVE ACTION-FOUR FORM TOOLS (FNTO) TO 0-79016 SPECIFICATION FOR FORMING OF WIRE END LEADS ON DIODES, RESISTOR S, AND CAPACITORS HAVE BEEN FURNISHED. AN AUTOFORNER, HODEL UFERL 3/N 189 WILL ALSO BE SUPPLIED TO THE FACTORY.	ICATION FOR FORMING UFERL S/N 189 MILL	OF WIRE EN	END LEADS ON DIODES, RES SUPPLIED TO THE FACTORY.	NO NO N	DES, RESISTOR FACTORY,	
AUTOPILOT-SQUARE-AND	FAR CIRCUIT BCARD ASAL/TRANSISTOR-ENAS 27-45200-1	F18 27-45200-1	53E 610809	2	99		492842
FAILURE MODE- FAIL DURING603 MERE RECEIVED ON VERN MEINE I PITCH CHANNEL ASAI XTERNAL TO THE CANISTER DA	FAILURE MODE- FAIL DURING OPERATION. THE ITEM CANISTER FAILED DURING PERFORMANCE OF MAPCHE PROCEDURE E7-50237-6. MO -603 Were Received on Vernier Engine 1 Pitch Mull and Static Gain Checks. Transistors 33 and 94 (2n450) on Vernier E Weine 1 Pitch Changel Asai Circuit Board Were Shorted Collector to Emitter. This has caused by Shorting the Output E Xyernal to the Camister During Checks or trouble Shooting.	ED DURING PERFORMAN C 641M CHECKS. TRANS :108 TO EMITTER. THI	CE OF MAPK IBTORS SS S MAS CAUS	CHE PROCES AND G4 G NED BY SHK	DURE 1	PT-96237-6. NO ON VERNIER E	
CORRECTIVE ACTION- FIELD ITH THE AVE BYBTEH POWER O NG EFFECT ON THE SCRYOMNE WILL ALBO HAVE A DAMAGING	CORRECTIVE ACTION- FIELD PERSONNEL HAVE BEEN ADVISED TO EXERCISE CAUTION BURING SYSTEM CHECKS OR TROUBLE SHOOTING M ITH THE AJP BYSTEM POLER ON, MESBURING VOLTAGES WITH VOLT-CHIMMETER FUNCTION IN AMPERE OR LOW OHM SCALES HAS A DAMAGI ME EFFECT ON THE SCRYOAMF CANISTER CUTPUT, THE USE OF OBCILLOSCOPE, YTYM, OR ANY METER WITH A COMMON CHASSIS GROUND WILL ALSO MANE A DAMAGING EFFECT LHEW PROBED WITH MROWE LEAD.	RECISE CAUTION BURIN HOEFTER FUNCTION IN COSCOPE, YTWN, OR AN	IG SYSTEN (AMPERE OR IY METER WI	HECKS OR LOW OHN S TH A COM	TROUE SCALES	LE SHOOTING W 1 HAS A DAMAGI 143313 GROUND	
AUTOFILOT-BQUARE-A/B FILTER AND SERVOANF	AE81-0081/FC-5CO-03-030 AMPLIFIES	COMPOSITE-PACTORY	305	PACTORY	99		
FAILURE MODE-FAIL DURING OPERATE AIMER PITCH IBOLATION AMPLIFIERS.	FAILUNE MODE-FAIL DUNING OPERATION. NEGATIVE BUSTAINER BERVO BIAS WAS TOO MIGH DUE TO FAULTY PITCH BUCKOUT AND BUST INCH PITCH ISOLATION AMPLIPIERS.	O BIAS MAS TOO HISH	of aud	IULTY PITO	3	TROUT AND BUST	
STRIEN EPPECT-IMPROPER ANALUS SIGNALS.	ALCE BIONALS.						
						PACE 0556	

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SYSTEM TEST/REPORT WINSERS SUB-STRTEM FAILED COMPONENT NAME	MANE PART NUMBER	VEHICLE BITE DATE DIF TIME DIF	117E	OTH VENDOR PART NO	
VEHICLE EFFECT-COMPOSITE RESCHEDULED. CORTECTIVE ACTION-THE PITCH BUCKUUT AND ISOLATION AMPLIFIEKS MERE REPLACED.	ON AWPLIFIEKS WERE REPLACED.				: :
AUTOFILOT-SQUARE-A/B A-9K-D4-E62F FILTER AND SERVOAMP TRANSFORMER	FAN 87-43200-1	23E 610728	7.778	22	41696
FAILURE MODE-FAILED DURING OPERATION. THE YAM CHANNEL HAD NO OUTPUT DURING THE PERFORMANCE OF APCHE PROCEDURE 27-99 ZED-9, CARD 143. AMALYSIS INDICATED THAT TRANSFORMEN TE MAS DEFECTIVE. FROM RESULTS OF SPECIAL TESTS, IT APPEARS THA TA MISAPPLICATION OF POMER TO THE 11SVCLT PRASE A INPUT MAY HAVE OCCURRED DURING TROUBLE SHOOTING. CORRECTIVE ACTION-CORRECTIVE ACTION-CORRECTIVE ACTION-CORRECTIVE ACTION-CORRECTIVE ACTION-TO NOT APPLICABLE AS IT MAS CONCLUDED THAT THE CAMISTER FAILED DUE TO UNDETERM?	HANNEL HAD NO CUTPUT DURING TREET TE MAS DEFECTIVE. FROM IA INPUT MAY HAVE OCCURRED DISCABLE AS IT WAS CONCLUDED TO	HE PERFORMAN ESULTS OF ST RING TROUBLE AT THE CANIS	CE OF AP ECIAL TE : SHOOTIN	CHE PROCEDURE R7-94 513, 17 APPEARS TH. 6. ED DUZ TO UNDETERN	
NED EXTERNAL MEANS, AND FAFB HAS BEFN SOLD TO THE AIR FORCE. THE FIELD MAS INFORMED OF THE TEST RESULTS. AUTOFILOY-SQUARE-A/B A-9F-04-5015-F FILTER AND SERVOAMF AMPLIFIER-FILTER 87-45E00-1 810724 MAFB NO FILTER AND SERVOAMF AMPLIFIER-FILTER 87-45E00-1 NO	E AIR PORCE. THE FIELD MAB II FAR E7-45E00-1	#00HED OF TH	K 7527 P	CSULTS. HO NO	•
FAILURE MOE-FAIL DURING OPERATION-LOW FILTER INTEGRATOR GAIN. DETECTED BY MAPCHE CAUSING A MO-GO INDICATION. Corrective action-no corrective action. Teating disclosed no Malfunctions in the ITEN, assumed Mapche Gave Paulit Dication.	NTEGRATOR GAIN. DETECTED BY 1 DISCLOSED NO MALFUNCTIONS IN	APCHE CAUSIN	K A 10-6	O INDICATION. APCHE GAVE PAULTY I	
AUTOFILOT-SQUARE-A/B CT-98-04-004F FILTER AND SERVOAMP SERVOAMPLIFIER-CIRCUIT BOARD	FAR BOARD 53-41000-1	104D 610721	364	NO 60/C	1
FAILURE MODE-FAIL DURING OPERATION. UNIT REJECTED, DURING X-1 DAY CMECKS, WHEN IT MAS NOT POSSIBLE TO GIMBAL ANY EN GINE. THE MODULATOR CIRCUIT BOARD WAS REPLACED, WHICH ALSO FAILED, BOTH CIRCUIT BOARDS CONTAINED DAMAED TRANSFORMER S. DIODES AND TRANSISTORS. UMACCOUNTED FOR TRANSIENTS, FROM AN EXTERMAL SOURCE, MERE CONSIDERED RESPONSIBLE FOR FAIL URE.	ED, DURING X-1 DAY CHECKS, WE WHICH ALSO FAILED. BOTH CIRCL IENTS, FROM AN EXTERNAL SOURCE	EN 17 MAS NO 17 BOARDS CC E. WERE COMS	of Possib Withined Hidered R	LE TO GIMBAL ANY EL DANASED TRANSFORMEL ESPONSIBLE FOR FAIL	
CORRECTIVE ACTION-MOME, CAUSE OF FAILURE MAS NOT DETERMINED.	T DETERMINED.				1
AUTOFILOT-SQUARE-A/8 98-04-247 FILTER AND HERVOAMP	FAR 27-43200-8	£1£	£	7E\$	-J. H. UJ
FAILUNE MODE-FAILED TO OPERATE AT PRESCRIBED TIME, DURING CHECKOUT OF THE MISSILE ALL THREE CHANNELS OF THE MISTER WOULD NOT MOVE FROM MULL, THE FAILURE WAS NOT CONFIRMED. THE FAILURE WAS ATTRIBUTED TO HUMAN ERROR OR LFUNCTION IN THE GROUND SUPPORT EQUIPMENT.	TO OPERATE AT PRESCRIBED TIME, DURING CHECKOUT OF THE NIBBILE ALL THREE CHANNELS OF THE ITEM CA Prom Mull, the Pailure was not confirmed. The Pailure was attributed to Human Error or to a ma No support equipment.	BBILE ALL THAB AB ATTRIBUTE	REE CHAN D TO HUM	NELS OF THE ITEH CA AH ERROR OR TO A MA	
				PAGE 0557	

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DATE DIF THE DIF OTH VENDOR PART NO	CORRECTIVE ACTION-RELIABILITY IS MONITORING THIS TYPE OF CANISTER FAILURE IN AN EFFORT TO FIND CAUSE OF THE FAILURES. "FRSONNEL IN THE FIELD ARE REQUESTED TO CHECK ALL REPORTED FAILURES PRIOR TO REJETTING PARTS TO INSURE THE FAILURE HAS OCCURRED IN THE REJECTED PART.	BIGTAS FAIRCHIL NO 60/C	FAILURE HODY-OUT OF TOLERANCE, THE SUBJECT BENYONHPLIFIER WAS REJECTED WHEN NO-608 WERF, RECEIVED ON MAPCHE DECK EST. TOS. THE VERNIER MANBER I AND MANBER R ROLL FILTER INTEGRATOR 6AINS WERE OUT OF TOLERANCE ON THREE CHANNELS, FAILUR AMMEYS IS INDICATED NO BENYONHPLIFIER FAILURE, TROUDLEHOOTING AT PAIRCHILD REVEALED WIRING PROBLENS IN THE MAPCHE UNKTION BOX WHICH WERE CORRECTED, RENUN WAS SUCCESSFUL.	MARREN	TETER AND SERVOAME AMPLIFIER-TRANSISTOR E7-45200-1 610718 MO FAILURE MODE- FAIL DURING OPERATION, PROCEDURE 27-86237-7, DECR E37-706, CARD 20 GAVE A NO-GO INDICATION FOR VERNIE R ENGINE 2 IN PITCH MALL, FAILURE ANALYSIS VERIFIED THAT THE VE 2 PITCH AMPLIFIER MAS INDERNATIVE, TRANSISTOR 63 (2N 498) IN ASAI CIRCUIT BOARD MAS SHORIED FROM ENTITER TO COLLECTOR, THE INDENTED CASE OF THE TRANSISTOR WAS TOUCHING THE JUNCTICAL LEAD BINDING POSTS CAUSING THE SHORT.	CORRECTIVE ACTION-NO CORRECTIVE ACTION CAN BE INITIATED AS THE RESPONSIBLE AREA IN WHICH THE TRANSISTOR WAS DAMAGED COALD NOT BE DETERHIMED. INSPECTION SUPERVISION AT THE FACTORY MAYE BEEN INFORMED OF THIS PROBLEM.	SIDTIS FECTORY NO	FAILURE MOEFFAIL TO OPERATE AT PRESCRIBED TIME- THE BANBORN RECORDING FAILED TO INDICATE A ROLL SCAVO BIAS AND INT GRATOR EXERCISE. THE TEST EBUIPMENT MALFUNCTIONED AS UNLATCHING RELAY (KTOT) FAILED.	FROM STARTING.	TED SATISFACTORY RESPONSE.	PACE 0558
DIF DATA SOURCE W	F CANISTER FAILURE IN AN ORTED FAILURES PRIOR TO RE	FAR 27-45200-1	ER WAS REJECTED WHEN NO-G- GRATCR GAINS WERE OUT OF HOOTING AT PAIRCHILD REWE		E7-45200-1 6 -7, DECK E37-706, CARD ED THE VE E PITCH ANPLIFIER CALECTOR, THE INDENTED CA	AS THE RESPONSIBLE AREA FACTORY HAVE BEEN INFORMED	COMPOSITE-FACTORY 1	NBORN RECORDING PAILED TO LATCHING RELAY (K707) FAII	A AGE PREVENTED OPERATION (MA PERFORMED WHICH INDICA	
TEST/REPORT NUMBER FAILED COMPONENT NAME	HILITY IS MONITORING THIS TYPE C ARE REQUESTED TO CHECK ALL REP RECTED PART.	A-9K-D4-243-F AWLIFIER	ERANCE, THE SUBJECT SENYONMELIFIS 1 AND MANGER E ROLL FILTER INTE SENYOMMELIFIER FAILURE, TROUDLESS CORRECTED, REMUN WAS SUCCESSFUL.	A-9F-04-250-F	AMPLIFIER-TRANSISTOR THE OPERATION, PROCEDURE 27-96237 TO FAILURE ANALYSIS VERIFIED THAT RD MAS SHORTED FROM EMITTER TO FOSTS CAUSING THE SHORT.	CORRECTIVE ACTION-NO CORRECTIVE ACTION CAN BE INITIATED AS THE RESPONSIBLE AREA IN MICH THE TRANS COALD NOT BE DETERMINED. INSPECTION SUPERVISION AT THE PACTORY HAVE BEEN INFORNED OF THIS PROBLEM.	AES1-0807/FC-SCO-01-UIR NGLAY	FAILURE MOE-FAIL TO OPERATE AT PRESCRIBED TIME- THE BANBORN RECORDING FAILED TO INDI- EGRATOR EXERCISE. THE TEST EQUIPMENT MALFUNCTIONED AS UNLATCHING RELAY (KTOT) FAILED.	SYSTEM EFFECT-OPERATION DOES NOT START. FAILED RELAY IN AGE PREVENTED OPERATION FROM STARTING.	RELAY MAS REPLACED AND A RETEST HAS PERFORMED WHICH INDICATED SATISFACTORY RESPONSE.	
SYSTEM SUB-SYSTEM	CORRECTIVE ACTION-RELIABILITY IS WON S ERSONMEL IN THE TIELD ARE REQUES' E HAS OCCURRED IN THE REJECTED PART.	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAM	FAILURE HODY-OUT OF TOLE -703. THE VERNIER MURGER E AMALYSIS INDICATED NO SJUNCTION BOX WHICH WERE C	CORRECTIVE ACTION-NOME, AUTOFILOT-SQUARC-A/B	FILTER AND SERVOAM* FAILURE MODE- FAIL DURIN R ENGINE 2 IN FITCH MALL. AWB) IN ASAI CIRCUIT BOAR WE JUNCTICH LEAD BINDING	CORRECTIVE ACTION-NO CON	AUTOFILOT-SQUARE-A/8 FILTER AND SERVOAMF	FAILURE MOE-FAIL TO OPE EGRATOR EXERCIBE: THE TER	SYSTEM EFFECT-OPERATION	CONSECTIVE ACTION-THE RE	THE REPORT OF THE PROPERTY OF

SEMERAL DYNAMICS CONVAIR DIVISION

BIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE

18 JUN 1888

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VEHICLE SITE PRI VENDOR NAME DATE DIF TIME DIF OTH VENDOR PART NO		T-98235-S (DEC LOED THAT SHOR ROUBLE SHOOT IN CARD 63, 85 AN CARD 63, 85 AN CARD 63, 85 AN CARD 64, 85 AN CARD		D VERNIER ENGINE ASSESSED ASSES	TES GO/C NO PLIFIER NAS DEPECT	-17.
F O	m ð	# 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2 2	4170 401	1 2 E	9
817E 71ME DIF	TARET.	HE PROCEDI AMALYSIS C HECKS AND AGAI CIRCI SYSTEH CHE IN THE ANY	FAIRCHIL YES	W AND PITC EALED VE. O. 3 DEFEC PITCH/ENI SYSIEM CHE ANTERE CH	SERVO AN	# F1 -50
VEHICLE DATE DIF	40630	CE OF MAPC PAILURE BYATEHS C WE ON THE C COMPLEX R FUNCTION PAILURE FANCE FANC	14E 610629	ALTSIS REVAULTIES NELIFIES NEL	17E 81060E AT THE ROL	# 1691 %
DIF DATA BOURCE PART NUMBER	FAR 27-45200-1	DUBING PERFORMAN 13 ON ALL CHANKELS SHANE O COMPLEX 11ER WAS INDERATI 13E CAUTION DURING 1 THE UCLT-CHANKETE 1 THE UCLT-CHANKETE	FAR 27-45200-1	PREVENCED THAT WE TRUE ANY YAW, ABA1 BOARD A YAW, ABA1 BOARD A WEI PITCH/ 85/VEI I BE CAUTION DURING HY WOLT-CHREEFER F. OF GOSCILLOSCOPE, THE MAGNE LEAD.	COMPOSITIE-B FACT	JT ABBIGHED THE BA
TEST/REPORT NUMBER FAILED COMPONENT MAME	98-04-248 CIRCUIT BOARD TRANSLATOR	FAILURE HODE- FAIL DURING OPERATION. THE 11EM PACKAGE PAILED DURING PERFORMANCE OF MARCHE PROCEDURE 27-99253-3 IDEC RS 233-70E). THE PACKAGE LAS REPORTED TO MAVE LOST THE OUTPUTS ON ALL CHANKELS. FAILURE ANALYSIS CONCLUDED THAT SHORT TIME THE OUTPUT CIRCUIT EXTERNAL. TO THE CANISTER DURING PERFORMANCE OF COMPLEX STRIEDS CHECKS AND/OR IROUBLE SHOOTIN 6 METHODS CAIDED THE CANISTER FAILURE, SOCRIER DURING OF COMPLEX STRIEDS CHECKS AND/OR TROUBLE SHOOTIND OF THE ABABISTORS WERE FAILURE. SOCRECTIVE ACTION-FIELD PERSONNEL HAVE BEEN ADVISED TO EXERCISE CAUTION DURING COMPLEX SYSTEM CHECKS OR TROUBLESHOOD TIME WITH A/P SISTEM POMER ON, MEASURING OUTPUT VOLTAGES WITH THE VOLT-CHAMFETER FUNCTION IN THE AMPERE OR LOW ONM 3C ALES HAVE A DAMASHING EFFECT CHAMFETER CANISTER WITH A COMPONING OF COSTILLOSCOPE, VITH OR ANY METER WITH A COMPONING OF COSTILLOSCOPE, VITH OR ANY METER WITH A COMPONING OF COSTILLOSCOPE, VITH OR ANY METER WITH A COMPONING OF COSTILLOSCOPE, VITH OR ANY METER WITH A COMPONING OF CASTILLOSCOPE.	A-9K-04-E41-F AMPL IF (ER/TRAMS) STOR	FAIL TO OPERATE, THE MAPCHE A/P TEST PROCEDURE/DECKS 233-237/REVEALED THAT WERNIER E YAW AND PITCH AND VERNIER EMPT NE. 10 PITCH AND VERNIER EMPT NO. 1 PITCH COMMANDS FAILED TO GINGAL THE EMBINES AS PRESCRIBED. FAILURE ANALYSIS REVEALED WEI PITCH, ASAI BOARD ANTIFIER MO. 2 DEFECTIVE. ASZEMBACKHI TIER LEADS WEITED OPEN, CRAZIMAGAZ BURNED OPENA4 /VER YAM, VEI PITCH, ASZVEL PITCH, VER PITCH/EMITTER TO COLLECTOR BHORTED. CORRECTIVE ACTION-FIELD PORSONARL HAVE BEEN ADVISED TO EXERCISE CAUTION DURING COMPLEX SYSTEM CHECKS OR TROUBLE SHOOTH WATCHES WITH AZE STRUCKED IN THE SERVO AND CANISTER OUTPUT, THE USE OF OSCILLOGOOPE, YTVM, OR ANY HETER WITH A COMMON CHAS AS A DAMAGHME EFFECT ON THE SERVO AND ENEX MENDAGED WITH THE WROME LABO.	AASI-DOTS/PI-SCO-DI-17 COMPOSITE-B FACT 17E 11/EIR TES 60/C CONTROL ROLL SERVO AMPLIFIER F TOLERANCE, DURING THE FACT COUNTDOAN IT WAS DETERMINED THAT THE ROLL SERVO AMPLIFIER WAS DEPECT	WE. (NO SPECIFIC DATA). BYBTEH EFFECT-ERRATIC OPERATION. WEHICLE EFFECT-COMPOSITE RESCHEDULED, FACT TEST MAS RERIN BUT ASSIGNED THE BANE TEST NUMBER F1-5CO-01-17. CORRECTIVE ACTSOM-REFLACED CONTROL AMPLIFIER.
ATATEM BUG-BYATEM	AUTOPILOT-BOURE-A/B FILTER AND BERVOAMP	FAILURE HODE- FAIL DURING OPE RB 233-70E). THE PACKAGE WAS R TIME THE OUTPUT CIRCUIT EXTERN 6 HETHODS CAUSED THE CANISTER D CRS TRANSISIONS WERE FAULTY. CORRECTIVE ACTION-FIELD PERSON TIME WITH A/P SYSTEM POWER ON. ALES HAVE A DAMAGING EFFECT ON.	AUTOFILOT-SQUARE-A/B	FAIL TO OPERATE, THE MARNE NE. NO. 1 PITCH CORMANDS PARELLE BY MELTED OPEN, CHARTED. CORRECTIVE ACTION—FIELD OTING WITH ACTION—FIELD OTING WITH ACTION—FIELD SA DAMAGINE EFFECT ON THE SATA GROAND WILL ALSO PAWE	AUTOFILOT-BAUARE-A/B FILTER AND BERVOARF FAILURE HODE-OUT OF TOLE	IVE. (NO SPECIFIC DATA). SYSTEM EFFECT-ERRATIC OPERATION. VEHICLE EFFECT-COMPOSITE RESCHEDLED, FACT TE CORRECTIVE ACTION-REPLACED CONTROL AMPLIFIER.

SENERAL AMICS CONVAIN DIVISION

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BYBTEM BUB-BYBTEM	TEST. REPORT NUMBER FAILED COMPONENT MANE	DIF DATA BOURCE PART NUMBER	VEHICLE DATE DIF	VEHICLE BITE PRI	PRI VENDOR HANE	
AUTOFILOT-BRUARE-A/B	BR-04-RIB AMPLIFIER-IRANSISTOR	FAR 87-45800-1	15E \$10313	FAIRCHIL YES	YE B NO	\$0 * 6 * 6 * 6 * 6 * 6 * 6 * 6 * 6 * 6 *
FALLURE MODE-FAIL DURING ITCH-YAM AMPLIFIER. TRANS AD AN OPEM-CIRCUIT IN THE	URING OPERATION. THE FAILURE MAS CAUSED BY A SHORT-CIRCUIT PLACED ON THE OUTPUT CIRCUIT OF THE PATAMSISTOR 6-3 ON CHCUIT BOARD A6-AE SHORT CIRCUITED FROM EMITTER TO COLLECTOR. TRANSISTOR 6-5H IN THE EMITTER LEAL CAUSED BY EXCESSIVE CURRENT.	BY A SHONT-CIRCUIT HONT CIRCUITED FROM CURRENT.	PLACED ON EMITTER TO	THE OUTPUT	CIRCUIT OF THE P. TRANSISTOR 0-5H	
CTIVE ACTION-HOME-	CCF RECTIVE ACTION-MOME-NO CORRECTIVE ACTION ID POSSIBLE SECAUSE	CAUSE THE ORIGIN OF	THE PAILU	THE FAILURE IS NOT KNOW.	NCA.	
AUTOFILOT-SQUARE-A/B	A9-04-EEG CIRCUIT BOAND, DICOR	FAR 27-41368-3	930 \$10305	FACTORY	YE\$ 60/C NO	1003137
FAILURE MODE- OUT OF TO EA AM OUT OF MPECIFICAT	FAILURE MODE- OUT OF TOLERANCE, A SHORTED DIODE CAS (SVBDS) OF THE URABAS MODULE BOARD OF THE SERVO AMPLIFIER CANIS TER AM OUT OF SMECIFICATION OUTPUT FROM THE (-) ED WOLT FORER SUPPLY.	OF THE URABAS MODU ER SUPPLY.	LE BOARD O	¥ THE SER!	O AMPLIFIER CANIS	
COKPUCTIVE ACTION-THE BI	CORP/CTIVE ACTION-THE INSPECTIVE PROCURDENT GROUP HAS BEEN ENFORCING HORE STRINGENT INSPECTION AND TESTING PROCEDUES O HEED OUT ANY DEFECTIVE COMPONENTS BEFORE RELEASING TO FACTORY.	H ENFORCING MORE BIN	INCENT IN	PECTION AN	D TEATING PROCEDU	
AUTCFILOT-SQUARE -A/B FILTER AND SERVOAMP	AE61-0401/FC-5CO-01-047 AIPLIFIER-LAPAGITOR	COMPOSITE-FACTORY	47£ 010301	FACTORY	7£3 10	*****
FAILURE MODE-FAIL DURING K AND GAIN CHANGE FUNCTIO	FAILURE HODE-FAIL DURING OPFIZZION-BUSZAINER PITCH PEEDBACK INDICATED ENSINE OVERSHOOT AT STAGING, INTEGRATYS HULLI Ne and gain change function was caused by static charge buildup on the Gain Change Capacifor.	C INDICACED EMSINE C	VERSHOOT /	TOR.	SHIESKATON HOLL	
BYBIEN EFFECT-INFROPER ANALOG BIGNALS.	BYSTEN EFFECT-IMPROPER AMALO: BIGNALS. Wester Fefett-Momena model for serve camintes has to be installed at the bite.	STALLED AT THE BITE.				
CTIVE ACTION-ECP 1:	CORRECTIVE ACTION-ECP 1113 MAS INTITATED TO ADD A BLEEDER RESISTOR TO THE INTEGRATOR CAPACITOR.	RESISTOR TO THE INTE	GRATOR CA!	ACI TOK.		
AUTOFILOT-SQUARE A/B FILTER AND BERVOAMP	A-BK-G4-E54-F AMPLIFIER-PITCH, BUSTAINER/TRANSIS ET-45E00-1 TOR	FAR 5 87-45E00-1	146	FACTORY	TES RAYTHEON CO.	.
FAILURE MODE-FAIL DURING ESS-"JE) THE BUSTAINER GZSA) IN THE AGAS CIRCUI BADE.	PAILURE MODE-FAIL DURING OPERATION, THE AMPLIFIER FAILED DURING PERFOEMANCE OF TEST PROCEDURE ET-BESSS-S (APCHE DEC Ress-728) THE BUITAINGR ENGINE FAILED TO POSITION OR MULL IN PITCH, FAILUNG ANALYBIS REVEALED THAT TRANSIBION ES (E MOSBA) IN THE ABAS CIRCUIT BOARD OF THE BUBTAINER PITCH AMPLIFIER HAD AN EXCESSIVE REVERSE LEARAGE FROM COLLECTOR TO BABE.	MRING PERFORMANCE OF IN PITCH, FAILUME AN IFIER MAD AN EXCERS	TEST PROC ALVBIB REV I VE REVERS	EDURE ET-1 FELED THAT KELEARAGE	4233-5 (APCHE DEC TRANSSATOR 63 (2) FROM COLLECTOR TO	
CORRECTIVE ACTION-CORREC	CORRECTIVE ACTION-CORRECTIVE ACTION HAS BEEN INITIATED TO HAVE THE VENDOR ELIMINATE THE UMRELIABLE SITUATION THAT E ITSTS ON THIS TYPE OF TRANSISTOR AS TO WORRHAMSHIP AND QUALITY CONTROL VIA HAR BK-DA-478. 19°5 RAYTHEON CO HAS INITIA	HAVE THE VENDOR ELIM	IMATE THE	WHELIABLE	SITUATION THAT E	
					PAGE 0941	

CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOPILOT SYSTEM-AIRBORNE

8131EH 8U8-8131EM	TEST/REPORT NUMBER FAILED COMPONENT NAME	DIF L TA SOURCE PART NUMBER	VEHICLE DATE DIF	317E PR1	VEHICLE BITE FRI VENDOR NAME	
TED DESIGN AND MANUFACTU	TED DESIGN AND NANUFACTURING PROCESS CONTROL CHANGES TO IMPROVE THE UNIFORMITY, RELIABILITY AND VIELD ON TRANSISTOR TYPES ENSESA AND ENSESA.	PROVE THE UNIFCRHITY,	RELIABILI	TY AND TIEL	ON TRANSISTOR	992133
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAN	BK-G4-E19 AMPLIFIER-TRANSISTOR	FAR E7-45200-1	41E 410427	FORBES NO	deterministration of the second secon	*016
FAILURE MODE-SHORT OF PROM COLLECTOR TO ENIT	FAILURE MODE-SMONT SELECTI-TRANSISTORS 8-3 AND 8-5 ON CIRCUIT BO'ADS AS-AE AMPLIFIERS 1 AND E. FRON COLLECTOR TO ENITTER DUE TO A SMORT GIRCUIT PLACED ON THE CUIPUT GIRCUIT OF THE AMPLIFIER.	CUIT BO'.NDS AS-AE AMPL THE CLIPUT CIRCUIT OF	IFIERS STAFE	AND E WENE	MENE SHORT CIRCUITED	į
CORRECTIVE ACTION-NON AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF	CORRECTIVE ACTION-NOME-NO CORRECTIVE ACTION BECAUSE ORIGIN OF THE FAILURE IS NOT KNOWN. TOFILOT-SQUARE-A/B 90-D4-E15 LTER AND SERVOAMF R7-45E00-1 810417	FAR FAILURE 18 HC FAILURE 18 HC FAR E7-45E00-1		FAIRCHIL YES		19064
BALING TEST AND BOOSTER CORRECTIVE ACTION-NOME.	BALING TEST AND BOOSTER ENGINE NO. 2 GINBALED DURING BUSTAINER AND VERNIER ENGINE GINBALING TEST. Corrective action-nome.	INER AND VERNIER ENGIN	E CIMBALI	M6 TEST.		
AUTOFILOT-SQUARE-A/B	AE81-0272/FC-9C0-01-043 AMPLIFIER-CAPACITOR	COMPOST TE-FACTORY	435	FACTORY TES		67.67
FAILURE MODE-FAIL DURING OPERATION-SUS 6 AND GAIM CHANGE FUNCTION, CAUSED BY S EN ON MAMEROUS EARLY E SERIES MISSILES.	FAILURE MODE-FAIL DURING OPERATION-SUSTAINER PLYCH PEEDBACK INDICATED ENGINE OVERSHOOT AT STAGING INTEGRATOR MULLIN 6 AND CAIM CHANGE FUNCTION, CAUSED BY STATIC CHARGE BUILDUP ON THE GAIN CHANGE CAPACITOR-THIS WAS A REPETITIVE PROBL EN ON MUMEROUS EARLY E SERIES MISSILES.	IK INDICATED ENGINE OF	ERSHOOT A	T STACING TO	HEGRATOR MULLIN	
SYSTEM EFFECT-INFROPER AMALOG SIGNALS.	R AMALOF SIGNALS.					
VENTCLE EFFECT-NOME-1	E-SERVO CANISTER WAS TO BE REPLACED PRIOR TO PLIGHT.	OR TO PLICHT.		,		
CORRECTIVE ACTION-ECP	CORRECTIVE ACTION-ECP 1113 NAS INITIATED TO ADD A BLEEDZR RESISTOR TO THE INTEGRATOR CAPACITOR	RESISTOR TO THE SHIES	RATOR CAP	ICI YOR.	٠	
AUTOFILOT-SQUARE-A/B	AE61-0261/PC-6CO-01-005 AMPLIFIER-CAFACITOR	COMPOSITE-FACTORY	3F 610321	27.05		•

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FAILURE MODE-FAIL DURING OPERATION. DATA INDICATED A POBITIVE BUBTAINER PITCH AXIB OVERAMOOT OF R.T VOLTB AT STAGIN 6 INTECRATOR GAIM CHANGE AND MULLING FUNCTIONS. THIS MOVENENT WAS CAUSED BY AN ACCUMULATIVE STATIC CHANGE ON THE GAI M CHANGE CAPACITOR CAUSED IN TURN BY CONTROL TRANSISTOR LEARAGE CURRENT.

SYSTEM EFFECT-IMPROPER ANALOG SIGNALS-STATIC. CHARGE ON CAPACITOR CAUSED EXCESSIVE PITCH STERRING OVERSHOOT.

WENICLE EFFECT-COMPOSITE RESCHEDULED.

18 JUN 1966

SENERAL AMICS CONVAIR DIVISION

BVBTEN RUG-BYBTEN	TEAT/REPORT MUMBER	DEF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	VEHICLE BITE PRI		VENDOR NAME VENDOR PART NO	
CORRECTIVE ACTION-ECP 111	113 CORRECTED PROBLEM.				1		98410
UTOFILOT-SQUARE-A/B	BK-04-191	FAR 27-41000-813	196	7473	# Q		994754
FAILURE MODE-ERRATIC OPER BALLIMS INSTEAD OF THE PA	PAILURE HODE-ERRATIC OPERATION. DURING THE HYDRAULIC FILL AND BLEED TEST THE BOOSTER ENGINES WERE OBSERVED TO BE GI PRAILING INSTEAD OF THE PROGRAMMED BUSTAINER VERNIER ACTION.	NO BLEED TEST THE B	OOSTER ENG	INCO NERE	39 80	TWED TO BE 61	
INTOPILOT-SEUME-A/B	• }	7.1947	9E 610224	21	7.E.S		351900
FAILURE MODE-OUT OF ERPI 6 BOOSTER PMASE, THIS DI CER WHICH ARE LOCATED WI	FAILURE MODE-OUT OF EXPECTED TEST VALUE-TELEMETRY DATA INDICATED THAT THE VE VERNIER ENGINE DRIFTED ONE DEGREE DURI NE BOOSTER PHASE. THIS DRIFT IS ATTRIBUTED TO AERODYMANIC HEATING OF THE FEEDBACK TRANSDUCER OR THE TELEMETRY TRANSD UCER WHICH ARE LOCATED MITHIN THE WERHIER FAIRING.	CATED THAT THE VE VE A ATIME OF THE FEEDBA F THE FFEDBACK TRAN	ERNIER ENG CR. TRAMBDU SDUCER WOU	CER OR THE	9 m m	E DEGREE DURI EMETRY TRANSD LOPER ANALOG	
MINITER LIFECTION CONTROL AMELIA MINITER EFFECT-MONE-THE INDI	MINISTER EFFECT-NONE-THE REPORT HAD NO APPARENT EFFECT ON VEHICLE PERFORMANCE. THE RE-ENTRY VEHICLE IMPACTE	FROM MEATING THE VE ECT ON VEHICLE PERF	CHGINE PC ORMANCE. T	SITION TE	RY VE	TRANSOUCER	
D IN THE PLANNED TARGET AN CORRECTIVE ACTION-FUTUME LEARANCE CUTCUIS TO DECREA	AREA. E VEHICLES WILL HAVE PRODUCTION TYPE COVER PLAYES OWER THE WENIER PITCH CLAHSHELL FAIRING EASE AERODYMANIC INFINERENT INSIDE THE PAIRING.	COVER PLAYER OWER	THE VERNIE	A P17CM C	LAHSHI	ELL FAIRING C	
UTOFILOT-SQUARE-A/B	98-04-217 Transformer	FAR 27-41000-817	770 610222	E	76. 80		882138
FAILURE MODE-OUT OF TOLER OR OR DEMODULATOR CIRCUITS	FAILURE MODE-OUT OF TOLERANCE-THE GERTBCH RATIO TRANSFORMER READING WAS HIGH INDICATING AN UMBALANCE IN THE MODULAT BE OR DEMODULATOR CIRCUITS. THE FAILURE WAS NOT CONFINED.	READING WAS HIGH E	MD1CAT1M6	AN GRALA	¥ ₩	H THE MODULAT	
CORRECTIVE ACTION-NOME-	CORRECTIVE ACTION-NOME-PAILURE WAS NOT CONFIRMED.						
ILTOFILOT-SQUARE-A/B	98-04-175 DISPACEMENT SYNO AMPLIFIER	FAR 27-41002-629	970 610282	WTR	2 2 2 3	REARFOIT	
PAILURE MODE—PAIL TO CEAS Eater impication remained Elieved Grounded Imadverte	FAILURE MODE-FAIL TO CEASE OPERATION AT PRESCRIBED TIME, DURING AN APCHE DECK RUN THE RULL DISPLACEMENT GYRO FINE Later indication remained at 118 youts, pailure was due to an internally danaged magnetic amplifier heater control Ligued srounded imadyertently during previous testing, a piece of solder was found longed betheen two apche relay	RIME AN APCHE DECK. N INTERNALLY DANASE ECE OF BOLDER MAB F	RUN THE RU D MASHETTE OUND LODGE	LL DIBPLA AMPLIFIE D BEINEEN	A T T O	T GVRO FINE H TER CONTROL B APCHE RELAY C	
						PAGE 0963	

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SYSTER SCR-STSTER	TEST/REPORT HUMBER FAILED COMPOMENT NAME	DIF DATA SOURCE PART NUMBER	VEHICLE DATE DIF	117E	= X	VENDOR NAME VENDOR PART NO	
ONTACTS SUPPLYING 26V DC	ONTACTS SUPPLYING 28 Y DC CONTINOUSLY TO THE 67RO HEATER.						•
CORRECTIVE ACTION-REA APP	APPRIZED OF THE PAILURE AND ITS CAUSE, RCA INITIATED ACTION TO IMPROVE THEIR SUALITY CONTROL.	. RCA INITIATED ACT	104 TO 14	MOVE THE	***	LITY CONTROL.	
AUTOFILOT-SQUARE-A/B FILTER AND SCHOOMF	AE81-0028/FC-5CO-03-031	COMPOSITE-FACTORY	3;E 610214	FACTORY	22	enderen ennety e defenderen ennety en de enteren ennety en enteren en enteren en	*****
FAILURIE MODE-OUT OF TOLES	FAILURIE MODE-OUT OF TOLERANCE. LOW BIAS CONDITION OBSERVED ON SEVERAL PLIGHT CONTROL ENGINE MOVEMENTS. PROBLEM TRAC D TO GHE.	ON BEVERAL PLIGHT C	ONTROL EM	THE HOVE	KNT8.	PROBLEM TRAC	
BYBTEN EFFICT-OPERATION	SYSTEM EFFECT-OPERATION TOO LOM-PLIGHT CONTROL SYSTEM GAINS TOO LOM.	T00 LOW.					···········
WENICLE EFFECT-COMPOSITE	TE DELAYED- POST COMPOSITE TESTS REQUIRED TO DEMONSTRATE SATISFACTORY OFFRATION.	INED TO DEMONSTRATE	8A7187AC	TORY OPER	A 11 04.		
CORRECTIVE ACTION-TEST EA	EAUTIMENT RETURNED TO LAB. ON INSPECTION REJECT.	HON REJECT.					- †
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	90-04-17E DISPLACEMENT GYRO HEATER	FAR 27-41002-421	460	E 5	¥ES	YES KEARFOTT MO	94759
FAILURE MIDE-FAILED DURING OPERATION. 13V AFTER 1 HOM OF OPERATION. FAILUME TESTING.	FAILURE MIDE-FAILED DURING OPERATION. DURING CHECKOUT THE ROLL GTRO FINE HEATE" LIKCUIT SENSING LINE VOLTAGE READ S SY AFTER S HOME OF OPERATION. FAILURE HAS DUE TO A DAMAGED INGHETIC AMPLIFIER CONTROL UNIT PROSABLY GROUNDED DURING TESTING.	ALL GTRO FINE HEATE MEMETIC AMPLIFIER	CARCUIT	SENSING VIT PROBA	E. V. S. V. P. V.	OLTAGE READ 1	
CORRECTIVE ACTION-MOME.	CAUSE OF FAILURE NOT DETERMINED.						1
AUTOFI OT-SQUARE-A/B	AESO-0955/F3-503-00-06 VZ PITCH SERVO VALVE FUNCTIONAL IN BTRINENTATION	PLIGHT	9E 810184	13 11.3	ž 2		
FAILURE MODE-FAIL DURING OPERATION, AT 114.2 GROUND DUE TO EXCESSIVE AERODYNAMIC HEATING.	OPERATION, AT 114.2713ECOMDS AN ELECTRICAL LEAD ON THE VERNIER E ACTUATOR VALVE SHORTED TO AERODYNAMIC HEATING.	COTRICAL LEAD ON TH	E VERNIER	R ACTUAT	98 VAL	WE SHORTED TO	
SYSTEM EPPECT-IMPROPER AN THE ENGINE TO DRIFT TO TO R APPROXIMATELY 46.6 SECO	SYSTEM EPPECT-IMPROPER ANALOG SIGNAL, THE SHORTED LEAD CAUSED A LOSS OF CURRENT TO THE V2 SERVO VALVE THE ENGING TO DRIFT TO THE STOP IN THE PITCH PLANE, THE SHORT BURNED OUT THE OUTPUT TRANSISTOR OF THE R APPROXIMATELY 46.6 SECONDS AFTER THE INITIAL SHORT.	ID A LOSS OF CURREN	T TO THE UTPUT TRAI	YZ SERVO USIBTOR O		MATCH ALLONED BERVOAMPLIFIE	
VEHICLE EFFECY-LOSS OF W UTPUT TRANSISTOR OF THE SI ITY AT 180.87 SECONDS.	VEHICLE STABILITY, SHORTIMG OF THE SERVOVALVE CURRENT TO GROUND OVERHEAIED AND SHORTED THE O Servoamplifier ferhitting all embines to drift to their stops causing loss of vehicle stabil	CRVOVALVE CURRENT T TO DRIFT TO THEIN	STOPS CA	OVERHEATE JAING LOS	9 8	BHORTED THE O	
CORRECTIVE ACTION-INSTALL NE. REVISED VERNIER WIRING	CORRECTIVE ACTION-INSTALLED CURRENT LIMITING RESISTORS IN VERNIER CIRCUITRY. ADDED PROTECTIVE COVER TO VERNIER ENSI M. Revised Vernier wiring insulation to cover the Vernier valve and commector.	CANTER CIRCUITAY. A	DDED PROT	CTIVE CO	VER 70	VERHIER ENSI	

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N. S.	VEHICLE SITE PRI VENDOR PART HO DATE DIF THE DIF OTH VENDOR PART HO	SECTORY YES SECTOR SECTOR NO	FAILURE HODE-ERRATIC OPERATION. SANBORN RECORDER CHANNEL & (BUSTAINER YAN) INDICATED A POBITIVE ENGINE GVERSHOOT OF APPROXIMATELY S VOLTS AT INTEGRATOR MULLING AND GAIN CHANGE, THIS CONDITION MAS CAUSED BY ONE OF THE TWO SERIES CAP CITORS IN THE INTEGRATOR CIRCUIT.		ALD. POST-COMPOSITE TESTING REQUIRED. OF THE PILTER-SERVO PACKAGE WAS TO BE ACCOMPLISHED PRICK TO LAUNCH TO CORRECT THE	FROE FACTORY YES 896318 601227 NO	FAILURE MODE-ERRATIC OPERATION SUSTAINER YAW PEEDBACK INDICATED AN UNEXPECTED OVERBHOOT AT INTEGRATOR MALLING, BECA USE OF AN EXCESSIVE DELAT BETWEEN APPLICATION OF AIRECRNE POWER AND COMPOSITE START, AS A RESULT OWE OF THE TWO SERI ES CAPACITORS IN THE AIRECRNE FILTER-SERVO INTEGRATOR CIRCUIT WAS CHARGED, CAUSING THE OVERSHOOT UPON ITE DISCHARGE.			CORRECTIVE ACTION-A POST COMPOSITE TEST WAS ACCOMPLISHED WITH THE INTEGRATORS CONDITIONED AND WAS SATISFICTORY. THE MENO PACKAGE WAS BONED LED TO BE REPLACED PRIOR TO PLIGHT WITH ONE MODIFIED TO INCORPORATE A BLEED RESISTOR IN THE INTEGRATOR CIRCUIT.	GOLLEZ AM YES KEA IPOTT 884787	FAILURE MODE-ETRUCTURAL, DURING GYRO LAB TESTING THE GYRO MAS AUDISLY MOIST, MOISE MAS DUE TO A DRY SPIN MOTOR BEAR MG.	CORRECTIVE ACTION-YCAR TO REARPOTT TO INFROVE 6YRO BEARING CLEANING PROCEDURE TO ALLOM GREATER POROSITY IN BEARING PROCEDURE TO ALLOM GREATER POROSITY IN BEARING PENDOLIC MATERIAL. 60/C RETROFITTED 5 AND E SERIES MITH SYROS CONTAINING SPIN MOTOR SENSORS.	GOILLE ETR YES GO/C	CLERANCE-DIREING SYRO LAS TESTS VERHIER YAW READINGS AND MULL WOLTAGES HERE OUT OF TOLERANCE.
OPILOT SYSTEM-AIRBO	DIF DATA BOURCE PART NUMBER	COMPOSITE-PACTORY	8 (BUSTAINER YAND INDILATED A ME, THIS CONDITION MAS CAUSED		ING REGULRED. AGE WAS TO BE ACCOM	COMPOST TE-FACTORY	CATED AN UNEXPECTED DAER AND COMPOSITE : IT has CHARGED, CAU			ITH THE INTEGRATORS WITH ONE MODIFIED	FAR E7-4100E-637	MAS AUDIBLY MOISY.	CLEANING PROCEDURE MITH SYROS CONTAIN	FAR 27-41000-815	A VAN READINGS AND
DIFFICULTIES REVIEW-AUTOFILOT SYSTEM-AIRBORNE	TEST/REPORT NUMBER FAILED COMPONENT NAME	AES1-0010/FC-3CO-01-023 AMPLIFIER-CAPAGITOR	OPERATION. SANBORN RECORDER CHANNEL B. AT INTEGRATOR MULLING AND GAIN CHANGE. TOR CIRCUIT.	MAIOG STEMALS.	อี น	AE80-1083/FC-8CO-08-080 AMPLIFIER-CAPACITOR	ERATION SUSTAINER YAN FEEDBACK INDIK 1 BETWEEN APPLICATION OF AIREGREE PK KORNE FILTER-SERVO INTEGRATOR CIRCUI	MALOG BIGMALS.	T RESCHEDULED.	I COMPOSITE TEST WAS ACCOMPLISHED WI ALED TO BE REPLACED PRICK TO PLICHT	98-04-173 DISPLACENENT 6780 BEARING	DURING GYRO LAB TESTING THE GYRO I	TO REARFOIT TO IMPROVE 6YRO BEARING CLEANING PROCEDURE TO ALLOM GREATER POROS AGIRCHITIED D AND E SERIES HISBILES WITH GYROS CONTAINING SPIN NOTOR SENSORS.	90-04-136 AMPLER	REINCE-DIRECT GANG LAS TESTS VERNIES
18 104 1988	8787EH 8/8-8787EH	AUTOFILOT-SQUARE-A/B	FAILURE HODE-ERRATIC OPER APPROXIMATELY 3 VOLTS AT ACITORS IN THE INTEGRATOR	SYSTEM EFFECT-IMPROPER ANALOG SIGNALS.	VEHICLE EFFECT-COMPOSITE RE-SCHE CORRECT!/E ACTION-A DESIGN CHANN B CONDITION RCF 1113, C1C 7249).	AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMP	FAILURE WODE-ERRATIC OFF USE OF AM EXCESSIVE DELAY ES CAPACITORS IN THE AIRP	SYSTEM EFFECT-IMPROPER AMALOG SIGNALS.	VEHICLE EFFECT-COMPOSITE RESCHEDULED.	CORRECTIVE ACTION-A POST MENU PACKAGE MAS SONED-INTEGRATOR CIRCUIT.	AUTOFILOT-SQUARE-A/B	FAILURE MODE-ETRUCTURAL.	CORRECTIVE ACTION-YCAR T	AUTOFILOT-BEUARE-A/B FILTER AND SERVOANP	TOT DO THE WOOD TOTAL

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SYSTEM SUB-STSTEM	TEST/REPORT NUMBER PAILED COMPONENT NAME	DIF DATA BOURCE PART HUMBER	VEHISLE DATE DIF	\$17E TIME 01F	PRI VENDOR NAME OTH VENDOR PART NO	ğ	
NOMENT TO LESS IN LEGISLATION	CORPECTIVE ACTION-LARRACIAN, CAUSE OF PAILLINE COLAD HOT BE DETERMINED.	TERMINED.		and the second s	·	7.17	
AUTOFILOT-BEUARE-A/B FILTER AND SERVOAMF	AESO-0748/PE-401-00-60 AUTOFILOT PITCH BTABILIZATION FILT ER	P.187	\$38009 \$000\$\$	12 YEQ	YES 60/C	***	
FAILURE MODE-ERRATIC OPE HOVER PROGRAM MAS INITIAT HAD INCREASED TO ES CPS A	FAILURE MONE-ENRATIC OPCRATION-EXCESSIVE PITCH BENDING MODE OSCILLATION BEGAN TO BUILDUP INMEDIATELY AFTER THE PITC Hower Program was initiated at 15 seconds. Output was 6.2 deg per sec peak to peak at 25.5 cps at 20 sec. Presuency Had increased to 25 cps at 37 seconds. This obcillation damped after 49 seconds.	OSCILLATION BEGAN F PER SEC PEAK TO P ID AFTER 48 SECONDA	TO BUILDUP EAR AT 23.	CPS AT	ELY AFTEK THE PI ED BEC. FREGUENK	2,	
SYSTEM EFFECT-NOME.							
WENICLE EFFECT-HOME.							
CORRECTIVE ACTION-# CPS WEMICLES, THIS MILL PROVI	CORRECTIVE ACTION-8 CPS LAG SECTION OF STABILIZATION CHANGED TO 4.8 CPS LAG SECTION ON SAUARE AUTOPILOT ATLAS-ABLE VENICLES. THIS WILL PROVIDE GREATER ATTEMATION IN THE RANGE OF THIS OSCILLATION.	OF THIS OSCILLATION	CTION ON B	AUARE AU	OFILOT ATLAS-ABI		
AUTOFILOT-SQUARE-A/B	AE80-0359/PC-4CO-01-079 AMPL IF1ER	COMPOST TE-FACTORY	79D 60070&		9 9	\$25.00	
FAILURE MODE-FAIL DURING	FAILURE MODE-FAIL DURING OPERATIONROLL GYRO BIABING AND MALLING WERE REDUCED.	KALING NERE REDUCE	á				
SYSTEM EFFECT-OFENATION TOO LOM.	TOO LOM.						
WENTCLE EFFECT-COUNTDOM	VEHICLE EFFECT-COUNTDOMM, COMPOSITE DELAYED OR RESCHEDULED. POST-COMPOSITE TESTING RESUIRED.	POST-COMPOSITE TEL	TING REGUT	ė			
CORRECTIVE ACTION-ROLL T	CORRECTIVE ACTION-WOLL TORRUCE AMPLIFIER (AGE) WAS FOUND TO MAYE LOW GAIN AND MAS REPLACED.	HAVE LOW GATH AND	HAS REPLACE				
AUTOFILOT-SQUARE-A/B FILTER AND BERVOAMP	AE60-0382/FC-5CO-02-US	COMPOSTIE-FACTORY	5E 600613	PACTORY	YES NO	****	
FAILURE MODE-ERRATIC OPE TO MAXIMUM AMPLITUDE AT 1. URDEQUENT RETESTING AND M	FAILURE MODE-ERRATIC OPERATION- THE SANGORN RECORDER INDICATED AN UNEXPECTED BUSTAINER YAM ENGINE MONTMENT OF 3 YOU. TB MAXIMUM ANDLITUDE AT 121.65 SECONDS FOR A DURATION OF D.8 SECOND. THIS CONDITION COULD NOT BE DUPLICATED DURING S UBBEQUENT RETESTING AND WAS COMSIDERED ACCEPTABLE TO EMSINEERING PERSONNEL.	TED AN UNEXPECTED 8 SECOND, THIS CONDI TING PERSONNEL.	USTATHER Y	AN ENGINE	MOVENENT OF B TOPLICATED DURING	 ਰ ••	
STREET EFFECT-ERRAFIC OF	SYSTEM EPPECT-ERRATIC OPERATION- UNEXPECTED SUSTAINER YAM MOVEMENT OCCURRED AT 121.85 SECONDS.	WENENT OCCURRED AT	121.05 80	corps.		<u>.</u>	
VENICLE EFFECT-COMPOSITE	WENICLE EFFECT-COMPOSITE RESCHEDULED. FOST COMPOSITE TESTS HADE TO DETERMINE CAUSE DID NOT SHOW ANY PROSLEM.	ADE TO DETERHINE C	AUSE DID H	07 BMON /	NY PROBLEM.		
CORRECTIVE ACTION-NOME.						-1	

SEMENAL AMICS CONVAIR DIVISION

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BYSTEN BLG-STSTEN	TEST/REPORT NUMBER PAILED COMPOSENT MANE	DIF DATA SOURCE PART NUMBER	VEHICLE BITE.	PRI VENDOR NAME OTH VENDOR PART NO	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAMF	98-54-104 SERVO AMPLIFIER COMECTOR	FAR E7-41000-800		7E\$	••••
FAILURE MOCE- FAIL TO DICATED AN GUIPUT MITH TION CORRECTED ITSELF.	FAILUME MOCE- FAIL TO CEASE OPENATION AT PRESCRIBED TIME, UNIT REMOVED FROM MISSILE BECAUSE ROLL SERVO AMPLIFIER IN DICATED AN OUTPUT MITH NO INPUT APPLIED, ROLL CHANNEL MAS ALSO INTEGRATING INCORRECTLY, FAILURE CONTRMED, BUT OPERA TION CORRECTED ITSELF.	UNIT REMOVED FROM HI ALBO INTEGRATING INCO	BBILE BECAUSE ROLL RRECTLY, FAILURE C	SERVO AMPLIFIER IN OMFIRMED, BUT OPERA	/
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAM	HL-AS-DA-ESSF CIRCUIT BOARD LEASAR/CAPACITOR	FAR E7-45200-19	108D FACTORY	9.9	0146
FAILURE MODE-OUT OF SP REVEALED THAT CAPACITO IN THE IMPUT OF THE CIR THE INSTABILITY.	FAILURE MODE-OUT OF SPECIFICATIONTHE URASAR MODULE BOARD WAS SENSITIVE TO MEAT AND IT MAS UNSTABLE. VISUAL CHECK REVEALED THAT CAPACITOR C1 WAS INSTALLED IN REVERSE POLARITY. ANALYSIS REVEALED THAT TWO CAPACITORS WERE INSTALLED HI THE INFULT OF THE CIRCUIT BOARD IN THE REVERSE POLARITY. THE REVERSED POLARITY CAUSED CLACITOR DETERIORATION AND	INTY. AMALYSIS REVEALE THE REVERSED POLARIT	EAT AND IT NAS UNG D THAT TWO CAPACITY T CAUSED CLPACITOR	TABLE, VIBUAL CHECK ORS WERE INSTALLED DETERICRATION AND	
CORRECTIVE ACTION-RUR INDIVIDUAL CORRECTIVE A STALLATION TECHNIQUES.	CORRECTIVE ACTION-RUR 98-04-672 NAS INITIATED TO QUALITY CONTROL INSPECTION TO TAKE RENEDIAL ACTION IN THEIR APEA. MOIVIDUAL CORRECTIVE ACTION IS BEING TAKEN BY ISSUING AN AVO TO INSPECTORS MARING REPETITIVE MISTAKES ON CORRECT IN TALLATION TECHNIQUES.	CONTROL INSPECTION TO AVO TO INSPECTORS MAN	TAKE REMEDIAL ACT ING REPETITIVE MIS	ACTION IN THEIR AREA. MISTANES ON CORRECT IN	
AUTOFILOT-SQUARE-A/B FILTER AND SERVOAM	A-9P-04-3540F AMPLIFIER	FAR 27-41500-831	100F PAFB	7E3 NO	10176
FAILURE MODE-OUT OF TOLES TIC-GAIN, THE FAILURE HAS THEEN PIN S OF YS AND THE	FAILURE MODE-OUT OF TOLERANCE, MAPCHE CHECKOUT SHOKED MO-GOS CH VERNIER E YAN-ACTIVE-MULL AND ON VERNIEP E ROLL-STA TIC-GAIM. THE FAILURE HAS COMPIRHED. THE SERVOAMPLIFIER-FILTER PACKAGE FAILURE IS DUE TO A POOR BULDER COMMECTION BE THEEN PIN S OF TE AND THE BASE OF AS IN THE VERNIER E YAM-PLUS-ROLL AMPLIFIER.	-605 CH VERNIER E YAN- ILTER PACKAGE FAILURE FLUS-ROLL AMPLIFIER.	ACTIVE-MULL AND ON 18 DUE TO A POOR 1	VERNIET E ROLL-STA	
CORRECTIVE ACTION-RAR-	CORRECTIVE ACTION-RAR-9P-04-3616 DATED DEC. 7, 1962 MAS WRITTEN REQUESTINE THAT MAMFACTURING PERSONNEL BE INFORMED OF THE RESULTS OF THE AMALTSIS AND BY REGUESTING THAT THEY FOLLOW PROPER SOLDERING TECHNIQUES.	MITTEN REGUESTING THA	T HAMERACTURING PERING PERING	RSCHOEL BE INCORNED	
AUTOFILOT-SEUARE-A/B	8P-80-04-4287 AMPLIFIER, TRANSIBTOR	FAR E7-41000-857	1370 WIR	YE\$ 60/C	
FAILURE MODE- FAIL TO TRAMBILITORS &S AND 85 ALLY SHORTIME THE AMPLE	FAILURE MODE- FAIL TO CHERATE, BUBTAINER EMGINE MOLD MOT WALL IN YAW DUE TO COLLECTOR TO EMITTER SHORT CIRCUITS IN TRAMSISTORS &S AND 85 OF THE BUBTAINER YAW AMPLIFIES, THE DAMAGE TO THE TRAMSISTORS WAS PROBABLY CAUSED BY ACCIDENT LLY SHORTIMS THE AMPLIFIER OUTPUT TO GROUND DURING TROUBLE MHOOTIMS. THE ACTUAL CAUSE WAS HOT LEARNED.	MALL IN YAM BUE TO C DIMAGE TO THE TRANSI E AMOOTIME. THE ACTUM	CLECTOR TO EMITTE STORS MAS PROBABLY L CAUSE MAS NOT LE	A SHORT CIRCUITS IN CAUSED BY ACCIDENT ARMED.	
CORRECTIVE ACTION-NOME.					

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SEMERAL DYNAHICS CONVAIR DIVISION

			1	2000		1	:			# * *			
PRI VENDOR NAME STH VENDOR PART NO	٤	ST. IT MAS RE CO. FAILURE W INSIDE THIS R	TIVE FOR DESI	YES CORPELL-DUBILI	DUE TO V SHAP TING IN AN UN		GENERAL ELECTR	PLY BECAME & DOZE.		SENERAL ELECTR	CAME ERRATIC	O REDESIGN PO	
	YES RPC	CONFIRM CONFIRM ECTIONS	18 1140		ERRATIC N, RESUL	o.	7. 3. 0. 7.	FOREN SU		7. 6. 7.	SUPPLY BE	H 17ED 7	
VEHICLE SITE DATE DATE	5	COUNTDOAN TAB CONN	RESISTOR	FACTORY	LECAME	APPROVE	Š	1 80 VDC 783). REF		2/03	POMEN S	7001 910	
VEHICLE DATE DI	0462	LAUNCH (AFRT 10E	650126	H CHANGE	.ECP 3841	4 0110	10N, MINU	100	11217	404 60 VDC	1-1). Ect	
DIF DATA BOUNCE PART HUMBEN	7AR R7-44688-W	FIER FAILED DURING A MOS. THEN RETURNED T TUNED BY RPC. CHE OF	MENTS, THE APC-TYPE	UTP-PRT	TURE-VIBRATION, PITC N BOARD AAAL CAUSING	TO 850 FOR APPROVAL	148-473 141-414 141-414	TEMERATURE-VIBRATI PPLY BOAND URAGAR (F	DICOLS 1778 88-85:14	C19-981 R4-41 784	ATURE-VIBRATION, WIN ARD URABAR (P/M RT-4	01:00E8 (P/H 68-63116	
TEST-REPORT HUMBER PAILED COMPONENT MANE	NZ-60-04-4030-F AMPLFIER, RESISTOR	DURING OPERATION. AUTOPILOT BERVOAMPLIFIER FAILED DURING A LAUNCH COUNTDOWN LOOP TEST. IT MAS RE R PITCH MAY 3D PERCENT LOW FOR 1.5 BECOMDS, THEN RETURNED TO NORMEL. PAILURE COMPIRMED. FAILURE W ENHITTENT TYPE AFWILDE RESISTOR MANUFACTURED BY RPC. ONE OF THE EAD TAB COMMECTIONS INSIDE THIS R LEN BOLDENED.	CORRECTIVE ACTION-NOME. AS RESULT OF THE MIL-R-83 REQUIREMENTS, THE APC-TYPE APRT 10E RESISTOR IS INACTIVE FOR DESI M AND NO LOWER PROCURABLE.	SSCESSA.E AMPLIFIER, CAPACITOR	FAILURE MODE-ERRATIC OPERATICM. DURING PRT Y-AKIS TEMPERATURE-VIBRATION, PITCH CHANNEL BECANE ERRATIC DUE TO V SHAP ED TIM STRIP BREAKING ON BOTH ENDS OF CAPACITOR (1868/PD) ON BOARD AAAL CAUSING INTERNITTANT OPEN, RESULTING IN AM UN STABLE AMPLIFIER. REPER TO FAILURE LOG MANGER 550-3-003.	PARTS INFROMEMENT ECP WILL BE SUBMITTED TO 55D FOR APPROVAL.ECP 3642 APPROVED.	FR-69AE696 CIRCUIT BOARD, BIODE	C OPERATION, DURING PRT (REBINA) X-AXI3 TEMPERATURE-VIBRATION, MINUS 60 VOC POMER SUPPLY BECAME LEAD OF DIODE SEPARATING FROM POMER SUPPLY BOARD URAGAE (P/M 27-41783). REFER TO FRR DGEB.	MAIS DIONES TO BE REPLACED WITH INDAUD DIONES IF/H 88-83:18-17: ELF /881 SUGMITTED /C HELLTING TO USE FOAM WAS APPROVED.	FR-69A2696 CIRCUIT BOARD, DIODE	IC OPERATION, DURING PRI K-AKIS TEMPERATURE-VIBRATION, MINUS 60 YOC PONER SUPPLY BECAME ERRATIC. Diode separating from Poner Cupply Board Urasar (P/M ET-41783), Refer to FRR DSES.	MESS DIODES TO SE REPLACED WITH INSSE DIODES (P/H 65-63118-1). ECP 7691 SUBMITTED TO REDESIGN PO ID USE FOAM MAS APPROVED.	
3737EH 846-8737EH	AUTO-ILCT-BOURE-A/B	FAILURE MODE- FAIL DURI PORYED THE BOOSYER E PIT AS CAUSED BY AN INTERNIT ESISTOR HAD NEVER BEEN 8	CORRECTIVE ACTION-HONE. AS 64 AND NO LONGER PROCURABLE.	AUTOPILOT-SQUARE-AA	FAILURE MODE-ERRATIC OF ED TIM STRIP BREAKING ON BTABLE AMPLIFIER. REPER	CORRECTIVE ACTION-PARTS	AUTOPILOT-SQUARE-A/B		CORRECTIVE ACTION-19538 DIODES TO BE REPLACE MER TUPPLY MODULE AND USE FOAM WAS APPROVED.	AUTOFILOT-SQUARE-A/B	PAILURE MODE" ERRATIC C BUE TO ANDE LEAD OF DIC	CORNICTIVE ACTION-INSSS DIODES TO SE REPLACE NER SUPPLY MODULE AND USE FOAM MAS APPROVED.	

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GENERAL ANICS

BIFFICULTIES REVIEW-AUTOFILOT STSTEM-AIRBORNE

DIP DATA SOURCE WEHICLE SITE PRI VENDOR NAME PART MANGER DATE DIF TIME DIF OTH VENDOR PART NO TEST/REPORT MASER PAILES CONFORENT HAME 8787EH 848-8787EH

PASC 0568

11 Jun 1984

SCHERAL MICS CONVAIR DIVISION

DIFFICULTIES REVIEW-AUTOFILOT BYSTEM-AIRBORNE

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BIF DATA SOURCE VEHICLE SITE PRI VEHOOR HANG PART MUMBER DATE DIF TING DIF OTH VEHOOR PART NO TEST/REPORT NUBER PAILED CONFORMENT MANE 8787EH 848-8787EH

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